

**THE IMPACT OF TEACHING PHYSICAL EDUCATION IN ENGLISH THROUGH  
CLIL IN A FOURTH-GRADE CLASS AT INSTITUTO TÉCNICO SUPERIOR IN  
ELEMENTARY SCHOOL BRANCH PEREIRA**

**YUSLEIBY MOSQUERA OSSA**

**MAIKOL STIBETH CHAPARRO ARICAPA**

**JOSE OMAR JARAMILLO MARTINEZ**

**UNIVERSIDAD TECNOLÓGICA DE PEREIRA**

**FACULTAD DE BELLAS ARTES**

**LICENCIATURA EN BILINGÜISMO CON ÉNFASIS EN INGLÉS**

**PEREIRA**

**2018**

**THE IMPACT OF TEACHING PHYSICAL EDUCATION IN ENGLISH THROUGH  
CLIL IN A FOURTH-GRADE CLASS AT INSTITUTO TÉCNICO SUPERIOR IN  
ELEMENTARY SCHOOL BRANCH PEREIRA**

**TRABAJO DE GRADO COMO REQUISITO PARA OPTAR AL TÍTULO DE  
LICENCIADO EN BILINGÜISMO CON ÉNFASIS EN INGLÉS**

**ASESOR**

**CLARA INÉS GONZÁLEZ MARÍN**

**LICENCIATURA EN BILINGÜISMO CON ÉNFASIS EN INGLÉS**

**FACULTAD DE BELLAS ARTES Y HUMANIDADES**

**UNIVERSIDAD TECNOLÓGICA DE PEREIRA**

**PEREIRA**

**TABLE OF CONTENT**

TABLE OF CONTENT .....	3
ABSTRACT .....	6
1. PRESENTATION .....	8
2. STATEMENT OF THE PROBLEM.....	9
RESEARCH QUESTIONS .....	15
General Objectives .....	15
Specific Objectives .....	15
3. THEORETICAL FRAMEWORK .....	16
3.1 Literature review .....	16
3.2 Conceptual Framework .....	20
3.2.1 Content Language Integrated Learning (CLIL).....	20
3.2.1 Types of CLIL.....	20
3.2.1.1 Hard CLIL.....	21
3.2.1.2 Soft CLIL .....	21
3.2.2 The 4Cs of CLIL .....	21
3.2.2.1 Content.....	22
3.2.2.2 Communication .....	22
3.2.2.3 Cognition .....	22
3.2.2.4 Culture .....	23
3.2.3 Characteristics of CLIL .....	23
3.2.3.1 Choosing appropriate content .....	23
3.2.3.2 Developing intercultural understanding .....	24
3.2.3.3 Using language to learn and learning to use language .....	24
3.2.3.4 Making meanings that matter.....	24
3.2.3.5 Progression.....	25
3.2.4 Applying CLIL.....	25
3.2.4.1 Verbal scaffolding .....	26
3.2.4.2 Content scaffolding .....	26
3.2.4.3 Learning process scaffolding .....	26
3.3 English Language Teaching Strategies .....	27
3.3.1 Use of Visual material .....	27

3.3.2	Use of music and songs .....	27
3.3.3	Grouping activities .....	28
4.	METHODOLOGY .....	29
4.1	Type of Research .....	29
4.2	Type of Study .....	30
4.3	Context .....	31
4.4	Setting .....	32
4.5	Participants .....	33
4.5.1	Learners/Students .....	33
4.5.2	Researcher's role .....	34
4.6	Data collection methods .....	35
4.6.1	Observations.....	35
4.6.2	Fieldwork/Reflective Journals .....	35
4.6.3	Tests.....	36
4.7	Instructional design .....	36
4.8	Ethical considerations .....	38
4.8.1	Informed consent.....	39
4.8.2	Demonstrate respect .....	39
4.8.3	Ensure anonymity, confidentiality and privacy .....	39
4.9	Data analysis.....	40
4.9.1	Instrumentation/Row data.....	41
4.9.2	Data Condensation .....	41
4.9.3	Data Display.....	41
5.	FINDINGS AND DISSCUSSION.....	42
5.1	Usage of complementary materials and teaching strategies.....	42
5.1.1	Using visual aids as a complement to teach and enhance student's comprehension..	42
5.1.2	Strategies to use songs effectively to teach English vocabulary inside the classroom.....	48
5.1.3	Group division as a strategy for teaching and controlling students' behavior outside the classroom.....	55
5.2	CLIL Challenges when implementing Physical Education in L2 .....	60
5.2.1	Lack of verbal instructions in and outside the classroom.....	60
5.2.2	Emphasis on content activities rather than in language activities .....	63
5.2.3	Lack of Balance among the 4 Cs of CLIL .....	65

5.3 Students' progress regarding content acquisition before and after lesson implementations. ....	67
6. PEDAGOGICAL IMPLICATIONS .....	79
7. LIMITATIONS OF THE STUDY .....	81
8. CONCLUSIONS .....	83
9. APPENDICES.....	85
REFERENCES .....	86

**ABSTRACT**

This research study sought to determine the impact of learning English through Physical Education with fourth graders. The focus of the study was on identifying students' language and content progress, CLIL challenges, and teaching strategies. The CLIL approach proposed by Coyle, Hood, and Marsh (2010) was used for supporting the integration of language and content throughout the process. The implementation lasted six weeks with a frequency rate of one hour and a half per week in a fourth-grade class from the Instituto Técnico Superior Elementary branch. The data was gathered using the qualitative method through instruments such as observations, journals, and tests. The participants involved were 35 students from Physical Education and three pre-service teachers from the Licenciatura en Bilingüismo con Énfasis en Inglés from the Universidad Tecnológica de Pereira. At the end of the implementations, it was found that the use of flashcards, songs, and grouping activities were helpful strategies for teaching English through Physical Education; besides, it was identified that the giving of verbal instructions, the teaching of content and language activities, and the balance among the 4Cs were the main challenges when implementing CLIL; and finally, it was determined that there was a positive impact on students' language and content learning.

## RESUMEN

Este estudio de investigación buscó determinar el impacto de aprender inglés a través de Educación Física con estudiantes de cuarto grado. El enfoque del estudio fue identificar el progreso del lenguaje y el contenido de los estudiantes, los desafíos de CLIL y las estrategias de enseñanza. El enfoque CLIL propuesto por Coyle, Hood y Marsh (2010) se utilizó para respaldar la integración del lenguaje y el contenido durante todo el proceso. La implementación duró seis semanas con una frecuencia de una hora y media por semana en una clase de cuarto grado del Instituto Técnico Superior Sede Primaria. Los datos se recopilaron utilizando el método cualitativo a través de instrumentos como observaciones, revistas y pruebas. Los participantes involucrados fueron 35 estudiantes de Educación Física y tres profesores de pregrado de la Licenciatura en Bilingüismo con Énfasis en Inglés de la Universidad Tecnológica de Pereira. Al final de las implementaciones, se encontró que el uso de ayudas visuales, canciones y actividades de agrupación eran estrategias útiles para enseñar inglés a través de la educación física; además, se identificó que la impartición de instrucciones verbales, la enseñanza de contenidos y actividades lingüísticas, y el equilibrio entre las 4C eran los principales desafíos al implementar CLIL; y, finalmente, se determinó que hubo un impacto positivo en el aprendizaje de idiomas y contenido de los estudiantes.

## 1. PRESENTATION

Every nation is in a race of developing 21<sup>st</sup> century citizens who are ready to face modern obstacles. One of the main characteristics of these modern citizens is about being able to communicate in the lingua franca making that goal as one of the principals for every nation in the implementation of foreign language education. This objective has shaken the world making every country re-evaluate their educative plans and goals for the new millennium. Nowadays, people have the necessity of communicating for political, economic, and educational purposes; that is why English has been chosen, among many languages, as the lingua franca that connects people around the world. The previous triggered that in the last decade, most non-English speaking nations were pushed to create and implement different approaches to English as a foreign language teaching such as CLIL, which stands for *Content and language Integrated Learning* according to Marsh (2012). It refers to the implementation of an educational model where subjects such as math, science, or social studies are taught through a foreign language maintaining a balance between both areas. In relation to the above, the following paper will present the statement of the problem, the theoretical framework, the research questions and objectives, the methodology, the findings, the pedagogical implications, the limitations of the study, and the conclusions of this research study focused on the integration of Physical Education and English language through CLIL in a fourth-grade class in Pereira.



## 2. STATEMENT OF THE PROBLEM

The following paper describes how is the reality around the world in relation to the failures in English language teaching, and to the process of the countries when adopting the idea of bilingualism using CLIL as the model to work on. In addition, it will be presented the Latin American reality and how it is turning more complex in the Colombian educational context by contrasting its environment with some other countries that although they have more resources, some challenges about integrating the CLIL model still arise. The studies conducted in the different countries presented in this paper have a strong relation to what our project developed since all of them have CLIL as the method used. At the end of this document, the group of researchers explained the importance that this project had in our own country and in Latin American as well.

To begin with, many educational systems in Latin American are facing challenges when incorporating CLIL into their language educational system; some of them are *The Lack of Bilingual Teacher Training*, and *The Inadequacies of instructional materials* (Cardenas, 1995).

In the former, Cardenas (1995) states that the teachers may know about linguistic aspects of English, but they do not have the enough pedagogical knowledge to teach it. Recent studies show that there has been some improvement in bilingual teacher training; however, it still points to the necessity of teaching training to achieve the bilingual goals of the 21st century. In Latin America, teachers from primary and sometimes secondary schools do not have enough English language proficiency level and preparation to teach EFL classes. For example, according to Colombia Aprende (n.d), in 2003 was developed a diagnostic test in Bogota in which was evidenced that more than half of the Colombian teachers do not have the level required to teach English.

To exemplify this, from the 6% of the teachers that belong to a professional organization, only one of them was affiliated to TESOL (Howard et al. 2016), which is an organization that requires teachers with a high level of English able to know how to use the methodology, materials, and activities showing a positive impact on students. Teaching English as a foreign language requires the use of the language in the implementations because communication between teacher and students through the language is essential. However, there are teachers who cannot speak English because they never learned it, or they just used it rarely without any pedagogical knowledge or educative purpose.

In relation to the second problem, it is common to find in school libraries with traditional native language content materials obtained from foreign publishers as the resources that teachers must work with. The books' content and materials propose scenarios that are unfamiliar, confusing for the learners, and even for teachers; as a result, those materials do not help the teaching and learning process because the realities and contexts are different. In addition, using materials from foreign contexts go against to what Cárdenas (1995) states about EFL education, in which he expresses that the materials should be appropriate, should not make students feel confused, and should be related to their own contexts.

In relation to Colombia, apart from having the two same problems presented before in Latin American's reality, we have other root problems. The first one is the lack of administrative-economic support, which means that the government is not providing education with enough money to increase teachers' salaries, and it does not cover the necessities of some students who need the PAE (Programa de Alimentación Personal), among others. The second one refers to the poor educational infrastructure, which means that with the poor economic support the government provides, the educational facilities, or schools,

have not enough academic spaces and tools that are required to teach and learn properly (Hurtado, 2016).

Those root problems affect CLIL because the schools and CLIL itself require appropriate educational spaces such as labs, sports fields, content and language materials according to the context, and teachers with enough language proficiency to teach both areas. The problems mentioned above has led to many fail attempts at reforming the language teaching educational system; these attempts are evident in the English educational programs proposed by the government to improve language learning in our country.

In Juan Manuel Santos' presidential term from 2010 to 2018, there were two ministers of education replacements that created different English educational programs which are *Colombia Very Well* (2015-2025) and *Colombia Bilingüe* (2014-2018). Although both aimed to develop English language proficiency and competences among Colombian students and teachers, the results of those projects presented wasteful and inefficient expectations due to the lack of resources, methodologies, and time to make it work. Most of these problems are because with every large governmental change the ministry of education is re-structured leading to a redesigned of each educational program proposed by the previous administration. This in return, provides a new language program created under a different perspective without the last one being fully implemented.

In addition, the *Ministerio de Educación Nacional* (MEN) established as one of the language educational goals that eleventh graders from public high schools should finish their studies with a B1 language proficiency level (Common European Framework of References for Languages, 2001). This is also presented in the *Guía 22: El Reto* (2006), which is the English standards for Colombian education. However, the country is still far from achieving this goal due to problems presented at the local levels. Primary and secondary schools are not

following the principles of scaffolding which according to Dickson, Chard, and Simmons (1993) as cited by Larkin (2002) is "the systematic sequencing of prompted content, materials, tasks, teacher and peer support to optimize learning" (p.2). This principle needs to be considered and incorporated into the school system where there should be a fluent English level transition between grades, assuring a continuous progression of knowledge to guarantee the achievement of the goal established by MEN. Unfortunately, in the Colombian English educational system this is barely applied (Linares, 2011).

Furthermore, the problematic we want to highlight as one of the most relevant is in relation to how English has become an isolated subject in most educational institutes. As Linares (2011) points out in her article *El inglés se enseña todavía de forma muy arcaica*, English is just another subject, meaning that it follows a traditional curriculum focused on content; this leaves an educational gap that does not promote interrelation between subjects not allowing English to be integrated into extracurricular subjects such as physical education, for example.

Different from the lack of articulation of English in extracurricular subjects, CLIL as a methodology has been a point of interest for different researchers that had developed studies about its implementation in schools. In Spain, for example, a study was carried out in which CLIL and Physical Education were integrated. Its findings stated that the biggest challenge teachers have is maintaining a balance between the activities planned when integrating CLIL and the balance it requires in the subject by having an equality in the content and the language used (Coral & Lleixa, 2014). In Belgium, another study was conducted applying CLIL with Mathematics and it was found that students improved their language performance (Surmont, Struys, Van Den Noort, and Van De Craen, 2016). Moreover, in Tunja, Colombia, a study was developed with students from fifth grade in a private bilingual school in which Science, Mathematics, and Social studies were taught through CLIL. The findings reveled

that it was difficult for teachers to implement CLIL because the teaching process was focused on the content leaving behind the balance between content and language (Mariño, 2014).

Although the previous studies are very significant for the development of this project, some gaps regarding the grade of students, time of exposure, and context of implementation were identified. To begin with, in relation to the participants enrolled in the study done by Coral and Llexia (2014), the implementation was developed only with students from 10th and 11th grade who already had certain background knowledge with the target language. It means that students from primary grades were excluded turning the study restricted, and only providing a perspective of a secondary education process.

On the other hand, the study by Surmont et al. (2016) showed that the process took a large amount of time; besides, the study was limited to students from secondary as well as the previous study presented. In the last study done by Mariño (2014), it was demonstrated that although there was a bilingual context where students were exposed to the language, the implementation of CLIL was still challenging because the focus was on content. Considering the grade of the students, the time they were exposed to the language and content, and the context of their learning process, it was concluded that focusing only in content affected the development of the project where a balance among language and content was the primary point of interest. Nonetheless, very little is known about implementing CLIL in physical education in primary grades.

Considering the previous studies and their findings in relation to the implementation of CLIL as a base to teach English as a foreign language, it can be stated that the importance of this research is in relation to how CLIL was implemented in a subject that is more practical. For instance, Physical Education, which is a subject different from the ones used in the studies presented before. This project provided other perspectives of the points to consider

when including a methodology as CLIL, but also it provided meaningful data about the results of implementing this model with primary learners.

Another crucial point to highlight is based on the findings previously mentioned that showed that CLIL was not balanced at all; therefore, since we are not Physical Education teachers, the current project was developed with Soft CLIL, which means that although the expectation was that students could learn the content and the language at the same time, the classes were planned to be more language-driven.

In relation to the previous ideas presented, the current project had the purpose of improving English language learning in a Colombian primary school through a proposal that differs from the regular way of teaching English as an isolated subject from the others. This project focused then, on promoting English learning by interrelating it with other subject of the syllabus, where the language learning took place explicitly while learning content. For such purpose, the project used CLIL, which has shown a great success in long terms because as Lamsfuss-Schenk (2002) as cited by Wolff (2003) points out, CLIL allows learners to understand better the content when it is taught through a different language from the native one.

With the development of this project, it was expected to contribute in the English teaching field, where it can be implemented from early grades with the aim of preparing more proficient users of the English language. On the other hand, this project contributed specifically to *Instituto Técnico Superior Sede Primaria* in the improvement of children's basic language skills while learning content from another subject, but also familiarizing students and in/pre-service teachers with the English language teaching in different academic contexts different from the classroom itself.

### **RESEARCH QUESTIONS**

1. What is the effect of implementing CLIL in Physical Education classes on students' English language performance?
2. What are the most relevant teaching strategies that can be evidenced when implementing CLIL in a fourth-grade class?
3. What were some of the challenges found when planning and developing CLIL lessons as English language teachers?

### **General Objectives**

- To determine the impact of teaching Physical Education through English.

### **Specific Objectives**

- To determine students' language progress through the integration of content and English.
- To identify teaching challenges when implementing English through Physical Education.

### **3. THEORETICAL FRAMEWORK**

#### **3.1 Literature review**

The implementation of new methodologies such as Content Language Integrated Learning (Henceforth CLIL) in the teaching practices has been a topic of interest in the research world for many years. This literature review will present important concepts for our study related to the implementation of CLIL, the implementation of CLIL with Physical Education and Mathematics, and the implementation of CLIL in terms of how it affects students' attitudes.

The research article named Towards Implementing CLIL (content and language integrated learning) at CBS (Tunja, Colombia) carried out by Mariño (2014) focuses on how to change from content-Based education to CLIL in a bilingual school in Tunja; the study was conducted with a fifth-grade class with fifteen students as the experimental group. Due to the diversity surrounding bilingualism in Colombia, it is difficult for private schools to change approaches. For this, a mixed method between quantitative and qualitative was used to gather information through the following instruments: Observation forms, teacher's journals, interviews, and student's tests. Through these instruments, the author found that teachers do not consider the development of the students' linguistic competences but are focused on the content. Looking at the findings, the author concluded that when implementing CLIL there may be difficulties because the classes need to be focused equally in content and language.

Mariño (2014) highlighted the importance of balance between content and language when using CLIL. Although the balance should be between Physical Education and English learning avoiding replacing the subject curriculum for a language subject, the current project



could not maintain such a balance because the pre-service teachers are language teachers but not Physical Education ones. Besides, although the 4 Cs of CLIL (Content, Communication, Cognition, and Culture) plays an important role when planning lessons (English and Physical Education), some challenges were found in the integration of the 4 C's because of the nature of both subjects. In the following article, we will focus on a more activity centered approach to find balance between leisure and academic tasks.

Another study named *La Enseñanza de la Educación Física Mediante el Enfoque Educativo CLIL: la Resolución de los Dilemas Profesionales Surgidos Durante un Proceso de Investigación-acción* carried out by Coral and Lleixà (2014) focuses on finding, establishing, and solving the problems teachers face when applying CLIL to a physical education class. The population involved in the study were twenty-seven students between 10th and 11th grade in a public school in Cataluña, Spain. Under the qualitative method, the data was gathered through the usage of two instruments; the first using a compilation of diaries done three times a week, and the second one by using recorded videos focused on the development of tasks to analyze student's performance. The authors concluded the study highlighting two different results. In the prior result, it was found that there was a problematic situation because when activities for fun were used, the linguistic objectives were not achieved; however, when teachers focused on effective activities, the linguistic objectives were accomplished, but the motor skills of students were affected. The latter result showed that it was difficult to maintain a balance between the four C's of CLIL (content, communication, cognition, and culture) with the activities normally conducted in a physical education class.

This study by Coral and Lleixà (2014) provided a different perspective about the importance of the activities selected to engage students. To be able to maintain a balance between learning and leisure, the tasks should be focused on the engagement and

interconnection between fun and learning without deviating to one single side. Like the study conducted by Coral and Lleixà (2014), the next study will present the results obtained from implementing CLIL with Mathematics emphasizing on the improvement of the students' performance.

Surmon, Struys, Van Den Noort, and Van De Craen (2016) developed a study named *The Effects of CLIL on Mathematical Content Learning: A Longitudinal Study* with the aim of investigating if students who learnt mathematics using CLIL have a better performance than those who did it in the monolingual way. This study was carried out in Ostend, Belgium with the participation of 107 students; thirty-five learnt mathematics through CLIL and seventy-two learnt in the traditional way. Under the qualitative method, the data collection was done using three mathematical tests: the first was applied at the beginning, the second one after three months, and the third one after ten months. When the implementation of the study finished, it was found that the level of performance of the students who learnt through CLIL gradually increased outperforming the ones who learnt only in their mother tongue.

The research by Surmon et al. (2016) contributed to this project by demonstrating that applying CLIL in a content-based class will gradually increase the students' performance in the subject over those who are learning in their mother tongue even though it was done with a different subject; However, the study also showed that for achieving these results, the amount of time required is an important point to consider in the current research. Besides influencing students' performance, the study by Lasagabaster and Sierra (2009) demonstrated that using CLIL also affects students' attitudes towards language learning.

The implementation of CLIL influences students' behavior as Lasagabaster and Sierra (2009) proposed in the research *Language attitudes in CLIL and traditional EFL classes*. Their objective was to determine the effects of CLIL on the students' attitudes towards the

foreign language. In the study, 287 students were chosen from four different schools in the Basque region; they were divided into the CLIL group and the EFL group which learnt in a traditional foreign language class. The data collection was done under the qualitative method through a questionnaire focused on seeing the students' attitudes towards the English learning. At the end of the study, the results concluded that students who learnt English through CLIL significantly had a more positive attitude than the students who learnt through the EFL traditional classes.

Lasagabaster and Sierra (2009) supported the current research project hypothesis, which considered that the use of English to teach physical Education would affect the students' perception and language performance in a positive manner by improving learning of the basic linguistic skills. However, motivation is not the only factor to consider, as Mariño (2014) proposes, there always must be a balance between language and content.

The previous studies presented relevant insights that directly contributed to the development of this project. Firstly, based on Mariño (2014), for the appropriate implementation of CLIL, it is important to maintain a balance between English and Physical Education to avoid the deviation on a merely language or content class; However, for the current Project is more relevant having an emphasis on language. Secondly, the study by Coral and Lleixà (2014) raised awareness by clarifying that balance goes beyond than only language and the content, but it also should be present in the type of activities proposed because due to the nature of the Physical Education subject, both fun and learning are important. Thirdly, using CLIL and maintaining a balance between the language, content, and activities contributes to an improvement on students' performance (Surmon et al., 2016). Finally, teaching English through Physical Education effectively may increase students' attitude towards the language learning (Lasagabaster and Sierra (2009). In other words, using English to teach Physical Education through CLIL involves important factors, such as

motivation, that need to be considered during the implementation to achieve a satisfactory teaching and learning process.

### **3.2 Conceptual Framework**

#### **3.2.1 Content Language Integrated Learning (CLIL)**

The acronym CLIL stands for Content and Language Integrated Learning which focuses on teaching and learning contexts, where a language different from the students' native one is used to teach a specific content (Coyle, Holmes & King, 2009). CLIL is a model first introduced by David Marsh in 1994, which is not focused only on language learning nor content learning, but where the two of them work as an engine in balance. CLIL involves 'dual-focused' goals for content and language respectively, so in a CLIL class, both are given simultaneously (Gabillon & Rodica, 2015). Although the idea of implementing CLIL is very challenging for teachers, it benefits CLIL learners in the sense that they are exposed to higher cognitive demands because they would be facing a new language and gaining knowledge from a curricular subject (Bentley, 2010).

When implementing CLIL, teachers can decide about which type of CLIL approach is more appropriate for the learners' context and necessities in relation to Soft and Hard CLIL.

#### **3.2.1 Types of CLIL**

Hard and Soft CLIL are also known as 'strong' and 'weak', both vary on the intensity on the language and the curricular content; while hard/strong CLIL focuses on the content, the soft/weak CLIL focuses on language (Bentley, 2010). The two types previously addressed will be expanded as follows:

### **3.2.1.1 Hard CLIL**

Hard CLIL immerses the students in the content presented on curriculums but focusing very little on the linguistic component since it gives priority to content. In other words, this type of CLIL is a Content-driven approach which gives priority to content instead of language; it means that in settings where total immersion is applied and in which interaction in a foreign language is presented, hard CLIL is intended to be used (Ball, 2009, cited in Gabillon & Rodica, 2015). Besides, using hard CLIL also implies involving the curriculum in the process since it specifies the content topics that must be taught in the target language (Bentley, 2010).

### **3.2.1.2 Soft CLIL**

Soft CLIL, on the other hand, is the part of the CLIL model that has a linguistic focus where teachers primarily emphasize their classes on language learning and its use in real interaction. In other words, Ball (2009) as cited by Gabillon & Rodica (2015) points out that this type of CLIL is a Language-driven approach and it differs from the content-driven presented before because the priority is interacting more in the target language and learning more about it. In other words, soft CLIL refers to the teaching of the target language through content topics (Bentley, 2010). That is why considering that the researchers are not experts in the content subject but are pre-service English teachers, the current project was intended to be based on the soft CLIL model because the focus was that learners improve their basic language skills through content from Physical Education subject.

### **3.2.2 The 4Cs of CLIL**

Coyle, Hood, and Marsh (2010) proposed that for planning a CLIL unit, it is necessary 4 different components that work as a ‘conceptual framework: content,

communication, cognition, and culture, also called the 4 Cs. These four dimensions should be interrelated and interdependent maintaining a balance among them (Coyle et al., 2009).

### **3.2.2.1 Content**

In simple words, content is the topic of the subject that learners will learn (Coyle, et al., 2010). Content is conceived as the systematic organization of knowledge from a determined curricular subject that a teacher is in charge of sharing, transmitting and reflecting about. The content dimension refers to the information or input that learners are going to receive from a trained teacher which has the purpose of facilitating the learning process of the learners in relation to different aspects of science, languages and culture (Bentley, 2010). In this sense, content refers to the understanding of the subject knowledge (Coyle et al., 2010).

### **3.2.2.2 Communication**

Language is a key aspect in communication, that is why learners use the target language to learn the content, express their thoughts, and share their opinions, but also to learn the language itself (Coyle et al., 2010). Furthermore, with the communicative dimension, it is possible to increase students' participation in the class about the topic of the subject that they are learning while using the target language (Bentley, 2010) reducing *Teachers' Talking Time* in the classroom. In fact, there is an integration of the content and the language dimensions.

### **3.2.2.3 Cognition**

By using reflections and engagement in thinking, learners are expected to create relationships among knowledge acquisition and development of new thinking skills. To achieve this, CLIL has the purpose of allowing the learner being aware of their own capabilities to expand their understanding, and to test it without concerning about their ages

or abilities. Cognition as one of the 4Cs of CLIL aims on increasing the critical thinking skills of the students for solving problems, construct and reflect on their own learning process, and to accept challenges (Coyle et al., 2010).

#### **3.2.2.4 Culture**

Learning a new language requires a new cultural knowledge, that is why Culture as one of the 4Cs recognizes that there are diverse contexts. Students may interact with people from different backgrounds and learn content from a different culture; that is why, the Cultural dimension of CLIL encourages students to recognize themselves and their own context to be able to accept the others' identity. In this dimension is essential the awareness of the diversity because identifying the differences and similarities between cultures will lead to a better understanding on students of the content (Coyle et al., 2010).

### **3.2.3 Characteristics of CLIL**

CLIL focuses on a foreign language teaching instead of second language teaching, that is why CLIL teachers should not necessarily be native speakers of the target language, but they should have certain knowledge in the content and in the language. Less than 50% of the CLIL content is taught in the target language and it is frequently applied when learners previously acquired language skills in the mother tongue (L1); for this, CLIL is used often in secondary levels (Coyle et al., 2009). The following are some of the characteristics of CLIL that, at the same time, are related with the 4Cs previously presented.

#### **3.2.3.1 Choosing appropriate content**

According to Coyle et al. (2009), lessons must contain relevant content that should be appropriate to the age of the learners, their abilities, and their interests. Furthermore, this

content should also help learners improve their skills and create new knowledge having in mind what they already know by providing meaningful interaction for learning.

### **3.2.3.2 Developing intercultural understanding**

Developing students' intercultural understanding is important in the CLIL classroom because the cultural dimension is included. It is not a matter of reflecting and knowing only about the foreign cultures, but also about the own one. In CLIL classrooms should be opportunities for students to analyze the content from the perspective of another 'cultural lens' creating their own understanding and acceptance of the diversity (Coyle et al., 2009).

### **3.2.3.3 Using language to learn and learning to use language**

Using background knowledge when interacting is crucial in CLIL and this is used as input to adapt language to student's appropriate level; moreover, spoken and written language are used as a resource to gather content information in the learning process by going beyond the current student language level. Finally, CLIL provides strategies to develop language learning when recognizing, identifying, and using prior knowledge to face listening and reading tasks (Coyle et al., 2009).

### **3.2.3.4 Making meanings that matter**

Coyle et al. (2009) point out that CLIL enhances foreign language interactions different from classroom settings, where learners can take advantage of authentic material through virtual sources; in addition, CLIL must integrate motivating tasks and diverse contexts where communication can take place to encourage students to take advantage of their cognitive skills and emotions to increase metacognitive awareness.



### **3.2.3.5 Progression**

As Coyle et al. (2009) point out, in a learning process should be executed a step by step procedure in which the mother tongue and the target language are included when developing content. It also should be accompanied by support related to speaking, writing, grammar and visual aids with the goal of improving skills in relation to language use and content learning to create new knowledge.

Learners will dominate language to approach systematic information with the purpose of developing their thinking skills when observing, analyzing, and generalizing by facing real contexts (Coyle et al., 2009).

### **3.2.4 Applying CLIL**

Coyle et al. (2009) support that CLIL gives benefits to educational facilities related with context in which it is applied. For example, they state that CLIL prepares students to be citizens of the world, this also benefits the school itself because it allows them to access to different international certifications that can increase the school profile. Regarding the benefits in content, CLIL prepares students to gain abilities by developing a better performance for coming studies, and by allowing them to be critical. When introducing CLIL under linguistic focus, learners from a CLIL program develop self-confidence skills when using another language; moreover, they will improve their different communicative skills in the target language increasing their awareness of the differences between their mother tongue and the foreign language.

CLIL encourage learners to be motivated towards classes by creating strategies to solve problems. In relation to learning, CLIL students gain self- awareness on how to understand other cultures by reflecting about how those cultures must be understood and tolerated

because they are conformed by different people with different points of view, attitudes, values, among others. Moreover, it enhances pluricultural perspectives in learners and it will help to complement their points of view (Coyle et al., 2009). To achieve the benefits CLIL provides, Massler, Ioannou-Georgiou and Esteiert (2011) proposes three different methods related to the implementation of CLIL:

#### **3.2.4.1 Verbal scaffolding**

CLIL teachers should provide comprehensible input for students by adapting their own language to the students' language proficiency. Furthermore, teachers should provide ways in which students can participate actively in the session no matter their limited linguistic repertoire (Massler et al., 2011).

#### **3.2.4.2 Content scaffolding**

Massler et al. (2011) state that to support the understanding of the learners and to increase their motivation with the content presented in CLIL classes, teachers should apply techniques that allow them to support the learning process while making the language input more comprehensible.

#### **3.2.4.3 Learning process scaffolding**

It refers to the necessity of CLIL teachers of supporting students in their learning process. It can be done by applying strategies that allow them to achieve the development of the learners' reflective skills, and, at the same time, improve their autonomy regarding their learning process (Massler et al., 2011).

### **3.3 English Language Teaching Strategies**

#### **3.3.1 Use of Visual material**

Canning (2001) cited by Cruz & Mosquera (2017) defines visual aids as the representation of a visual element of any type with the objective of constructing a more complete meaning of the element taught. This helps learners to create connection among the object, action, feeling or even an abstract idea presented in the visual support with the word that represents it taking advantage of their background knowledge where students associate new elements with the ones they already know. Visual references serve as a supporting tool that facilitates students' learning process by expanding their comprehension of topics or vocabulary as stated by Cruz & Mosquera (2017). In other words, when students are exposed to different visual supports such as videos, flashcards, pictures or images, a more complete view is created on students which help them to create a connection between the word and the object or action it represents in the supporting tool.

#### **3.3.2 Use of music and songs**

Knowledge can be presented to students in different forms, but this depends on the personal teaching style of the teacher as well as the objective to be achieved; for instance, one of those forms are the usage of music and songs of varied genres and cultures. According to Kuśnierek (2016), music has a considerable influence on society as well as in the language classrooms due to the fact that it is a source that language teachers found motivating for students to learn a new language different from their mother tongue. The implementation of this sources in teaching and learning process are considered as motivating elements that allow learners to approach different themes, but also to identify and practice a varied number of language structures. In addition, based on Bušljeta (2013), using songs to teach is not only done with the purpose of exposing students to an unlimited number of different topics such as

politics, history, science, but also to create feelings and emotions on students in order to make the learning process attractive for them.

In the same order of ideas, Scrivener (2005) considers that using recorded songs or playing a song using musical instruments inside the classroom are activities commonly added in lesson plans as fillers or as a way to maintain the flow; however, songs can be also done as an item closely related to the lesson's aim. Similar to Bušljeta (2013), Šišková (2018) considers that vocabulary teaching using music, specifically songs, is very effective if students are sentimentally related with them; in that sense, music would become an important element attached to the aim of the lesson which can be meaningful if the preferences of the students are considered. Therefore, since songs contain grammatical and functional aspects of the L2, they have been integrated in language coursebooks, but its usage inside the class will depend mainly on the content to be taught. In this sense, songs can be used to recycle and review words, grammar structures, introduce new vocabulary among others, showing that this source is essential in language teaching and learning (Kuśnierek, 2016).

### **3.3.3 Grouping activities**

When working in any activity indoors/outdoors the classroom, there are certain ways of developing it: as a whole class where the teacher is referring to all the members, or dividing a large class in groups, subgroups or pairs which is a more personalized interaction (Harmer, 2007). Burke (2011) considers that dividing a class into groups increases the students 'participation since they have more chances to be more active and to contribute to the group while developing the activities proposed. According to Harmer (2007) the way in which a lesson is planned to be conducted can be adapted to the specific context and it should be based on the characteristics of the topic taught or the activity developed, so if the activity is going to be proposed in an opened area, dividing the class into subgroups may be beneficial since it will allow students to be more engaged during its development. Moreover, Beebe &

Masterson (2015) considers that group division provide several advantages since it improves communication within the group that shares a common purpose, which is completing a task where each member of the group is cooperating and facilitating the task achievement.

#### **4. METHODOLOGY**

For the development of the project, there were some factors that characterized the nature and the focus of the study; that is why in this chapter it will be explained the type of research, type of study, the context, the setting, the participants, the researchers' role, the data collection methods, the instructional design, the ethical considerations, and the data analysis of the project.

##### **4.1 Type of Research**

Considering the nature of this research project, the qualitative method was chosen to gather and analyze the data. The information was gathered to understand the different results by describing, analyzing, and interpreting the data using qualitative methods, which means that this process deals with understanding the subjects' behavior. As Denzin and Lincoln (2005) point out, the qualitative research is defined as the practice of analyzing and interpreting the different phenomena that occur in the world; in this sense, the researchers who choose to work under the qualitative method observe people in their natural context trying to interpret their behavioral patterns and the different situations that cause them (Denzin & Lincoln, 2005).

According to Dörnyei (2007), although qualitative research can be messy in terms of generating useful data, it does not mean that qualitative data cannot produce valuable outcomes; nonetheless, it requires more work since there is a mixture of observations, field notes, journals, among others that need to be analyzed and interpreted. In this sense, Dörnyei

(2007) also specifies several types of qualitative research sampling that focuses on describing, understanding, and clarifying different data. The purpose of qualitative research sampling was to find individuals that could provide the current research study with some varied insights that could maximize the professional and individual experiences of all the people involved, such as the researchers, adviser, teachers, and students.

Based on the probability sampling strategies, the project used *Random Sampling*, which according to Merriam (2009) although the participants are immersed in the same experience, the researchers should know that everybody is not going to have the same experiences since the participants were chosen randomly.

For instance, for this project a sampling group which was exposed to different language and content tasks was selected. During the process, an observation and interpretation of the sampling was conducted in which the students' performance was analyzed in relation to language and content learning. The above was evidenced through language and content diagnostic tests, observations, and reflective journals which are part of the qualitative methods.

## **4.2 Type of Study**

The research project was a case study which was concentrated on observing, testing and reflecting on a small group of people (10 students) in an explicit setting where everything was gathered and documented. Merriam (2009) defines the case study as a 'bounded system', which means that the research has certain boundaries limiting time and amount of people involved.

Considering the qualitative nature of this project, the case study was characterized for being Descriptive. As Merriam (1998) points out, a descriptive case study is the one in which

a group of people and the situations they face are explored; then, as the name says, it is described exactly what happens during the implementation and why the events occurred when conducting the study. As this project was qualitative, most of the data was described based on the interpretation of the events, behaviors, attitudes, and performance of the limited group of students participating while learning English through Physical Education.

Finally, it can also be stated that the type of case study presented in this research project was Particularistic, which means that it was focalized on situations, events, or phenomena's because as stated by Merriam (2009), the findings were very important for the field to which the study belongs to and it may contribute to the language teaching program. This study required a careful analysis and interpretation of the different situations that the students faced throughout the implementation and their responses towards them.

#### **4.3 Context**

*The Instituto Técnico Superior sede primaria*, where the study was conducted, is an elementary school branch out of three of the *Instituto Técnico Superior*, and it is part of the Colombian public-school system under the control of the Ministry of Education. Since 2014, the *Licenciatura en Bilingüismo con Énfasis en Inglés*, which is one of the undergraduate programs at the Universidad Tecnológica de Pereira, has an alliance with this school. Because of this alliance, the university program and its pre-service teachers can develop their teaching practicum at the *Técnico Superior* installations for elementary grades with the purpose of improving pre-service teachers' professional and personal experiences in the language teaching field, and to teach to students a foreign language in order to increase their proficiency.

The *Instituto Tecnico Superior Sede Primaria* is a small facility located in *Ciudad Jardín* in Pereira, Risaralda that focuses on teaching primary grades from kindergarten to

fifth grade. Although this school has two academic days, one in the morning and one in the afternoon, this project was developed with the students of the morning. It has 280 students in total in the morning session, with an average of 36 students per classroom. There is one group per each grade except in fifth grade. In total, there are 13 teachers, and even though they are professionals in areas such as Social studies, Physical Education, Spanish, Arts, or early childhood, none of them have experience teaching English.

This institution has one exterior area for recreational purpose, which is a concrete field that all students share in their break time. The school did not destine a budget for classroom materials such as photocopies, basketballs, jump ropes, cones, or mats; that is why students' parents are asked to supply the materials and resources their kids need to develop the different activities throughout the year; however, for the development of the project all the materials were provided by the pre-service teachers.

#### **4.4 Setting**

Although this primary school did not have an English teacher, each one of them in charge of a group had to teach all the primary (Castellano, Matematicas, Ciencias y Sociales) and secondary subjects (Educacion fisica, Artes, Sistemas) as proposed in the PEI (Proyecto Educativo Institucional). Before the project, students were exposed to three hours a week of English classes with the practitioner of the *Universidad Tecnológica de Pereira*; once the project was in the process of implementation, students were exposed to 4 hours and a half per week. Furthermore, the school bases the English competences according to the Basic Learning rights of English.

This school provides education in early childhood and primary education with an average of 36 students per classroom, both male and female together in a co-ed public school context. The pre-service teachers from the *Licenciatura en Bilinguismo con Énfasis en Inglés*



did their practices there becoming provisional English teachers for the school. Although the person in charge of the process of teaching English must have a language proficiency superior to B1, as stated in the Common European Framework for Languages (2001), and the pertinent pedagogical competences for primary education, this creates a deficit in the required time students should be exposed to English throughout the year because out of the ten months of the academic calendar, only six months are covered by the university English practitioners leaving four months without any proper English language guidance, which is something that directly affects students learning process.

#### **4.5 Participants**

The population involved in this study were fourth graders from the public-school *Instituto Técnico Superior sede primaria*. There are 36 students in the classroom; however, the researchers using random sampling selected only 10 of them with the purpose of focusing on and analyzing their different reactions towards the English language and Physical Education learning. The researchers took the proper ethical permissions from teachers, administrative, and parents to use the information gathered exclusively for educational purposes.

##### **4.5.1 Learners/Students**

As mentioned before, there were 36 students involved in the project, all of them enrolled in fourth grade in the *Instituto Técnico Superior sede primaria*. From the 36 students, 20 of them were boys and the 10 remaining were girls; nevertheless, throughout the project only 10 out of the 36 students were randomly selected by using a strategy which consisted on asking students to write their names in a piece of paper, after writing it, the students were asked to put their names on a plastic bag and the researchers shook the bag and took out ten papers; the ones selected were the sample from whom their insights, experiences,

as well as the diagnostic test results applied at the beginning of the implementation and at the end of it were considered.

These students were native Spanish speakers whose ages were approximately between 9 and 10 years old. Furthermore, according to *Guía 22: El Reto* (2006), their English language proficiency level should be A2, however, after engaging and meeting the students, it can be considered that the real language proficiency was an A1 level since they basically understood the greetings, but they did not know the alphabet and just knew few body parts, for example. Even though pre-service teachers (UTP practitioners) provided support for the in-service teachers, they were not included in the research as participants.

#### **4.5.2 Researcher's role**

Since the researchers were involved in the process itself and, at the same time, they were teaching English and Physical Education class through the CLIL approach, the main role of the researchers was both, participants as observers. According to Merriam (2009), when you are a participant as observer, you are involved in the central activities assuming different responsibilities in the setting. In this research, the researchers were inside the classroom and sports field implementing the activities as English and content teachers and at the same time observing the students' performances to keep a record of what happened through different data collection methods described in the following section. This was done by dividing the researchers' role; while two researchers were the teachers in charge of conducting the activities, the other one oversaw observation and collection data based on the ten previously chosen students' performance and attitudes throughout the implementations.

#### **4.6 Data collection methods**

Recognizing that the current research used a qualitative method of gathering, describing, interpreting, and analyzing the information concerning students' insights, attitudes, and performances towards the lessons they received, the instruments used for the collection of the data were: Observations, reflective journals and diagnostic tests.

##### **4.6.1 Observations**

According to Merriam (2009), observations are done directly in the place where the phenomenon occurs, in this case, the classroom. Although observation is natural and unconsciously, it can be done in research by addressing a specific research question and doing it systematically. It indicates that observation gave the researchers the opportunity to interpret the phenomenon investigated based on the different behaviors, attitudes, and performances perceived. The observations carried out were focused on the students' performance during the lessons implemented. This was done through field notes which were taken from direct observation of each lesson.

##### **4.6.2 Fieldwork/Reflective Journals**

As it was mentioned before, observations were done to provide an external understanding of the data collected; however, combining this data collection method with fieldwork journals allowed the researchers to have a holistic interpretation and analysis of the phenomenon involved (students' performance and teachers' lesson planning). According to Merriam (2009), fieldwork journals involve the researchers in the setting, while on-site, they are supposed to observe, remember, and record all that belongs to the phenomenon such as the participants and their performance during the lessons. In addition to this, Merriam (2009) states that the researchers working with observations and fieldwork journals, have to be

aware in the sense that they may affect and be affected by the setting distorting the situation. The reflective journal took place after the implementations where the researchers wrote their insights regarding lesson planning and the different situations that occurred in each class; this reflection was then taken as bases to plan the next lesson.

#### **4.6.3 Tests**

Although tests are classified as quantitative methods because they involve numerical results, the researchers used two main tests that were done at the beginning and at the end of the implementation process. Those tests are called diagnostic tests, which are formative assessment tools that are used to measure what learners know and what they learned. After applying those diagnostic tests, a qualitative method of analysis was done to interpret the results. Something important to mention is that the tests were done in regards English and Content since the researchers implemented Content and Language Integrated Learning (CLIL) (See appendix 1).

#### **4.7 Instructional design**

Apart from using CLIL as the model for the project, researchers decided to work with the ESA procedure, which stands for *Engage*, *Study*, and *Activate*. First, learners were involved on the engaging step, then the learners were asked to focus on the ‘construction’ of something (language and content); and finally, activations were done, where learners used the language and the content learnt as freely as they could; however, there was a need to be controlling them in terms of behavior.

Having in mind the notion of freedom in practice understood as the student’s own motivation in using the language to communicate and interact during the classes, an

important implication was considered by the researchers in relation to the activation stage, which for the project carried out it was not possible to guarantee the autonomous use of language due to the nature of the subject (Physical education) and their integration with the foreign language (English). Due to this integration, the role of the researchers as teachers changed from being not only the English teachers but to teach both content and language simultaneously, which led the researchers to control students' in their Activation stage of ESA with certain activities accurate with the Physical Education subject.

CLIL and ESA were used focusing on the design of the lessons, each one of them and its design were aimed to integrate the 4Cs when possible; however, taking into consideration different aspects that are immersed into planning a Physical education class, all 4Cs could not be implemented at the same level because of the variety of the activities.

**Engage:** Harmer (2007) states that during this stage students need to be involved in the activities and tasks presented, since they need to find a positive emotional attachment which in the long term create a sense of motivations which leads to autonomous work (See appendix 2, activity #1: *Crazy body parts*). The reason why this step is relevant in the process of lesson planning and implementations is that students will create an interest in the development of the different activities proposed in each one of the implementations and the impact that it will have on their performance will be much greater.

**Study:** In this stage, the teachers must find a connection between the content and language to maintain the students engaged while the objectives of the course are achieved. This objective needed to be clearly proposed in the planning considering the linguistic items and content topics. As Harmer (2007) presents, study as an ESA step focuses on the construction of the knowledge related to students' immediate context. Linguistic aspects like pronunciation through strategies such as repetition and drilling were used as part of the

process of internalization of the concepts and words in relation to English (See appendix 2, activity #2: *My body and me*); in addition, content topics based on the school's curriculum were taught during the implementations.

**Activate:** As it was mentioned before, the more something is repeated, the more likely children and learners are to remember. The activation stage involves students doing exercises related with the different tasks proposed in the lessons and repeating those topics in different activities using their own knowledge and language based on a given situation provided by the teacher (See appendix 2, activity #4: *Racing for my body*). In words of Cameron (2001), this is called recycling. This final step of ESA involves a combination of the previous steps to create a bridge that compiles everything and help students to learn and identify the content and language taught as effective as possible by taking advantage of the learning and teaching experience.

Maintaining engagement as the premise of the process was relevant in the activate stage because of the impact it had, but also because including pieces of the study stage in the activation one for short periods of time was useful since it showed to students the importance of reviewing the topics taught before to facilitate the latter process when applying and practicing during the different tasks proposed in the subject.

#### **4.8 Ethical considerations**

This chapter will discuss different ethical considerations that were taken into account for the development of the project since in the study were involved underage participants. For this, the informed consent, the demonstration of respect, and the ensuring of anonymity, confidentiality and privacy were essential before, while, and after conducting the research.

#### **4.8.1 Informed consent**

According to Scott (2013), when conducting a research, it is essential to inform the participants involved about the nature, the purpose, and the methodology of the study. Therefore, for the current project, the researchers and the advisor went to the school *Instituto Tecnico Superior Sede Primaria* to talk to the coordinator and to the in-service teacher who were the main authoritative figures for the development of the project. Doing this, it was conducted a meeting in which both parties asked questions and provided information regarding the aim of the project, the time it was planned to be implemented, the school's assessment system, the syllabus of the grade, the in-service and pre-service teachers' roles, the schedule to implement, and the pre-service teachers' procedure to collect the data through diagnostic tests, journals, and observations with the participants. Finally, students were also informed about the purpose of the project and their role in the implementations.

#### **4.8.2 Demonstrate respect**

The researchers must be aware of the participants' generosity through the implementation of the research. Hence, the pre-service teachers must be able to adapt and to respect the school's policies to develop a collaborative work with the participants involved in the project (Akaranga & Makau, 2016). In this sense, the researchers demonstrated interest throughout the execution of the project, showed gratitude to the participants for their availability and commitment, and worked under the requirements of the school in a respectful way.

#### **4.8.3 Ensure anonymity, confidentiality and privacy**

As Akaranga & Makau (2016) points out, anonymity, confidentiality, and privacy in a research project refers to the act of keeping secret any specific and personal information that may give reference to the participants involved in the project. That is why the researchers were committed to maintain the confidentiality of all the students', in-service teachers',

coordinator's, and any other school employees' identity in the data collected by labelling them as anonymous. Moreover, this data was handled and analyzed only for academic purposes.

#### **4.9 Data analysis**

For this project, the analysis of the data gathered was done through Grounded Theory, which according to Glaser and Strauss (1967) can be defined as “the discovery of theory from data” (p. 1) that is systematically obtained and analyzed in research. Normally, a research project which is using Grounded Theory starts with either questions, or qualitative data, and then it is started a categorization process in which all the information collected after conducting the study is systematically discriminated and organized to find a well-supported theory (Glaser & Strauss, 1967).

The Grounded theory can be done deductively or inductively. First, in the deductive approach, as the data is being collected, investigators create different codes based on the research questions/objectives, then based on those codes, they look for patterns or similarities on the data which become the basis of the theory. On the other hand, the inductive approach works in the opposite manner by beginning with the deep analysis of the data looking immediately for the repeated patterns or similarities to create the different codes which work as the basis of the theory. In both approaches, the investigators -parting from the codes- continue to condense the information into categories leading to the bases for a new theory. For the current study, it was conducted an inductive approach in which based on the careful examination of the different instruments used to collect the data, it emerged some patterns that became in the categories of the study.

To be able to find such categories, the data analysis was conducted in the following way:



#### 4.9.1 Instrumentation/Row data

As previously mentioned, for this study it was selected three different data collection instruments based on the objectives and on the research questions of the study. The first instrument that was designed was the diagnostic test in which there were multiple choice and filling the gap questions; in most of the cases, the students were provided a word bank with the vocabulary (See appendix 2). Secondly, after the implementation of each class, the pre-service teachers developed a journal with their insights about the development of the classes. Finally, the pre-service teacher with the role of observer took field notes about what happened in each class.

#### 4.9.2 Data Condensation

The instruments without manipulation was considered as row data; however, after applying the instruments designed and developing a process of examination, it is considered as Data Condensation (Miles, Huberman, & Saldaña, 1983). Therefore, after conducting the first implementation, the diagnostic tests were graded and the fieldnotes of the observation were organized in writes-ups that, like in the journals, they were assigned a code, and all the lines of the texts were numbered. All these texts were read and analyzed, making an inductive process to find the patterns that arose, and highlighting them with a color according to the tendency found (See appendix 4).

#### 4.9.3 Data Display

When all the data was condensed, it was developed a process of discrimination of data through the design of a 'matrix' as proposed by Miles, Huberman, and Saldaña (1983). The matrix was divided in three columns: the first one was labelled *Instrument*, in which it was specified if it was a journal or an observation write-up. The second one was labelled *Code*, in

which it was provided the codes where the patterns already highlighted in the data condensation part could be find. For example, this is the code for one of the observations write-ups developed in the matrix (See appendix 3).

**Obs #3; Y; 8/05/18; L #38-40**

**Obs:** Observation

**Y:** The researcher as observer's first name

**8/05/18:** date of the observation (May 8<sup>th</sup>, 2018)

**L:** number of the lines in which the information was found

Finally, there was another column labelled *Category* in which it was provided a name for the different patterns or tendencies found in the codes established (See appendix 4). The development of this matrix through the process of discriminating, highlighting, and coding the data is known as Open Coding (Borgatti, n.d).

As final steps, it was conducted a process of axial coding, in which based on Borgatti (n.d), after having identified the open codes with the matrix, this information was interrelated and contrasted, and new codes emerged. Consequently, these axial codes were also interrelated which allowed to create some selective codes that are directly linked to the findings of the project.

## **5. FINDINGS AND DISSCUSSION**

### **5.1 Usage of complementary materials and teaching strategies**

#### **5.1.1 Using visual aids as a complement to teach and enhance student's comprehension**

The use of visual aids to support and reinforce the topics taught improved the students' understanding of the vocabulary in which there were different materials to complement the teaching act inside and outside the classroom. Those materials had the

purpose of supporting the teaching and learning process as a different proposal from the traditional way of teaching English; in this case, the physical education class taught through English was a combination of both areas divided into theoretical and practical session in which it was included flashcards, digital based images, videos and written references.

The aim of the physical education class in English was to measure the impact that it could have in the students learning process, for which a source that contained an image and a written reference of it. This pedagogical resource used were flashcards, videos, digital images and printed images that for this project proved to be meaningful due to the impact it had in the students learning.

Considering the previous ideas, using visual aids and materials were an important tool for lesson planning and professional growth because it was a complementary element that in the indoors sessions help the teacher to introduce vocabulary and it was used outdoors as strategy for instructions to get students perform the actions and vocabulary learned. The materials had different designs and purposes when developing different practical tasks in the classroom and in the courtyard; for example, in the indoors sessions, there main source of visual aids were digital based images using a video projector; while in the outside sessions, the visual aids revolved by using flashcards, printed images and written references to both as a strategy to give and follow instructions and to check and reinforce the vocabulary and themes taught inside

In the same order of ideas, this finding reports the effectiveness that using flashcards inside and outside the classroom had during the teaching process in the implementation of the project with fifth graders.

Based on the evidenced taken from the implementations, it seems that the usage of flashcards to teach and reinforce vocabulary and topics taught in class was effective because

it became a routine where students were taught in the first session of each lesson which was worked inside the classroom, in there the pre-service teachers in charge of developing the classes had thirty minutes to share the vocabulary, use the flashcards in different variations that went from being merely written words to others that had visual reference.

The combination of the materials used indoors and outdoors the classroom seemed to reinforce the students' comprehension of the vocabulary taught regarding actions, body parts, and sports concepts. This was found in the following evidence:

“We design flashcards with some action verbs written on them (jog, run, walk, jump) and told them to start moving around the courtyard according to the flashcards we show them”.

**Journal #3; J; 08/05/18; L24-26**

In the extract of the third journal made on May 8th, the researcher expressed that in the design of the lesson, flashcards were included with the purpose of teaching action verbs vocabulary; for example, flashcards with the written form of: jog, run, walk and jump that were used to elicit an expected physical response from students when they were in the courtyard as a warm up; additionally, the teachers used images that represented the actions to help students create an association between the written form and the real action. This process was developed during the first thirty minutes of every outdoors sessions with the purpose of activating student's background knowledge about the topics; moreover, the teachers were constantly adding new vocabulary to integrate new words while they reviewed the vocabulary already taught, which enhanced aspects such identification of words and meaning as well as pronunciation.

In the previous extract it is observed the point of view of one of the researchers regarding visual aids effectiveness when teaching the class, while in the following, the same phenomenon was evidenced from a different perspective of the other teacher conducting the

class. In the following excerpt the pre-service teachers stated how the use of flashcards worked in the lesson:

“It worked perfectly because we did not have the necessity of using body language with the kids, they read the flashcard and they understood what they had to do”.

**Journal #3; M; 08/05/18; L36-38**

In the extract of the third journal made on May 8th, from the other researcher's perspective, it was described the development of the activity in which flashcards were used as a complementary material that had a positive impact since they were self/explanatory, the flashcards replaced the teacher's body language and practically helped students to understand the actions they had to perform based on the written form or image. This meant that the teachers in charge of monitoring and developing the activities did not required extra efforts to control, manage, and direct the class outside in situations such as the giving of instructions and the execution of the activities during the warming up and practice.

This strategy was implemented as part of the warm up where students had to look to the flashcards for instructions and follow them for specific number of laps, this material helped them understand how to act without the teacher's direct intervention, they only needed to show the flashcards and the students immediately understood what they had to do.

The two previous extracts are taken from the journals developed by the teachers in charge of implementing the class in which it was observed how the visual aids helped the teaching and learning process; in the following, the position of how the material were used to make a relationship between the written and the actual action was presented on the following excerpt:

“Then, teachers pasted flashcards of four different action verbs (Run, walk, jog, jump). The teacher modeled the pronunciation and asked students to repeat each of the verbs and represented the meaning with his body parts.”

**Obs #3; Y; 8/05/18; L 40-42**

In the extract of the third observation made on May 8th, from the observer's perspective, it was described the development of the activity in which flashcards were used as a complementary material to create a relation between the written and spoken word under the method of repetition, the students had to look at the word and repeat after the teacher to practice pronunciation. The teacher would also point at the specific part or mimic the action being presented on the flashcard. This kind of exercises involving visual aids such as flashcards were normally used inside the classroom to introduce, reinforce, and teach vocabulary.

The previous extract was taken from the observation report developed by the teacher in charge of observing the class in which it can be seen how flashcards are used as complementary material to introduce, reinforce, and practice vocabulary; in the following, the position of how effective the usage of visual supporting materials were is also presented from the perspective of the observer who was in charge of looking at the events that occurred in the development of the lessons this can be evidenced in the following excerpt:

“At 9:20 am, the teacher organized students in a line and showed them a flashcard with the word WALK. Students automatically started to perform the action of walking for few seconds. The second action verb was JOG. This time, the teacher asked the students the following:

**Teacher:** what is this? (JOG)

**Student 1:** “correr”

**Student 2:** “¡no, trotar!”

**Obs #5; Y; 22/05/18; L 71-77**

In the extract of the fifth observation made on May 22th, from the observer's perspective, it can be observed the different advantages of using flashcards as pedagogical material with the purpose of giving instruction and directing the class outside during the practical stage and the positive reaction of the students towards this strategy. Based on the extract it can be evidence that the students were associating the written word with the performing action by developing the teacher's commands; nonetheless, this method is not fault proof, it depends on the student's capacity to retain vocabulary and the relationship the word learned holds to the students' daily repertoire usage.

This finding is related with the use of flashcards in activities to promote understanding of vocabulary and facilitate the following of instructions, in this sense Coyle et al., (2009) state that visual aids can be used to improve the students skills in regards to language use as well as in content learning in order to construct new knowledge. This can be done by introducing the strategy into the warm up of a physical education class since it can help students develop an association between the word, the image, and the action they have already learned in the theoretical input sessions. All of this was done while fostering pronunciation since in the process of showing them the flashcards the teachers were pronouncing the words multiple times and asking students to repeat. Based on these premises, it can be concluded that in our own teaching experience during the implementation, the integration of flashcards had a similar effect which was accompanied by the teacher's drilling to practice pronunciation by repeating aloud exercises to enhance student's productive skills while correcting any possible mistakes when pronouncing.

In their research Coral & Llexia (2014) also point out that in the process of combining an English class with Physical Education it is very important to incorporate images as a point of visual reference into tasks that involve language; based on this, it was meaningful to implement teaching tools like flashcards because it let students match vocabulary with their meaning in relation to the real action with the purpose of helping the students' process of learning words.

In the implementation of the current research, it was integrated similar methodologies regarding the usage of images or written references to teach vocabulary based on the results presented by Coral & Llexia (2014) in their research where the students started to identify, understand, and perform faster and efficiently the vocabulary presented in the flashcards.

In addition, the usage of flashcards in this project was considered as a tool that proved to be effective in maintaining students engaged and attentive in the classes; moreover, they were used as a source to review topics taught in the sessions and a form to make students comprehend and perform instructions easily. All of this can be associated with the study developed by Cruz & Mosquera (2017) where they found that using visual aids as a complement to teach vocabulary and grammar helped learners enhance their repertoire and the understanding of the vocabulary.

#### **5.1.2 Strategies to use songs effectively to teach English vocabulary inside the classroom.**

The usage of songs as a strategy to teach vocabulary and reinforce the students' learning each day as a routine helped them to identify the words taught using their own bodies, learning the meaning, internalizing each piece of vocabulary, and practicing pronunciation.



This finding reports the effect of using regularly songs about body parts during the implementation of the classes as a source to teach, reinforce and engage students in the process of teaching and learning English. The researchers considered that the integration of songs as a pedagogical tool to achieve the objectives already mentioned during the implementation of the classes was relevant because it was a more enjoyable proposal since it took advantage of the practical nature that the physical education subject represents, but also became meaningful because children between the age of eight to ten tend to like music and are not embarrassed of singing and dancing in public while taking advantage of their background knowledge which means that the songs were directed on teaching information they already know in Spanish but in English to increase their linguistic repertoire.

The aspect previously mentioned is important for the current project because it was an element that impacted positively the students' process of acquiring and adapting a new language to their day to day activities, but also because this is related to one of the main objectives of the current research about measuring the impact of teaching physical education through English taking into consideration that the researchers did not have any experience in working with primary learners in a field apart from English nor working with audiovisual sources with the objective of teaching and developing classes in a physical education context.

To evidence the integration of songs in the implementations, the researchers took pieces of information from the written observation reports and journals, in the third journal made by one of the researchers, it is evidenced how students were using their own body to point certain parts while the song was played. The coding of the piece of information is the following:

“In the song it also says “ears, nose, eyes, and mouth” to which the students reacted by learning them by pointing at the specific part when mentioned. The songs included more

that taught in class to which the teachers decided to use their bodies as a guide for the students as a starting point, by developing this activity students showed good understanding and capability in the identification of vocabulary. Furthermore, the students´ showed that they remembered the body parts and were able to connect the correct pronunciation”

**Journal #3; M; 08/05/18; L8-14**

In the extract of the third journal made on May 8th, the researcher expressed that the integration of a songs about body parts was meaningful because students were able to understand the vocabulary due to the context in which it was presented; this was manifested when they listen to the word “head” and immediately pointed at their own heads showing a clear evidence of understanding. Another interesting aspect to consider is that the songs included more vocabulary that they had not learnt in previous classes, this was evidenced when the teacher used himself as a model to introduce the new words that were in the songs; additionally, the students were able to understand what the new vocabulary meant by looking at the teachers´ clues presented through their body language. This had a complementary purpose to expand the student’s vocabulary input in connection with what they knew.

In relation to the students´ reactions, it seemed that students enjoyed singing and dancing when they practiced the songs with the pre-service teachers since it changed the methodology they were normally accustomed to in their classes, the songs were used as a warm up to activate the students´ previous knowledge and get them motivated; in that way, they would get ready for the teaching and practical stage inside and then outside the classes. Additionally, this strategy would also inductively teach them English vocabulary and help them in its identification in a more realistic context by listening to the words in the songs with its appropriate pronunciation and being able to point the part that was mentioned in the songs while saying it aloud and dancing meant that they were connecting the written word or symbol with the actual object while they were having fun.

In connection to the description already presented, the following extract was taken from an observation report done by one of the researchers in charge of looking at the reaction, participation and behavior of the students during the class where there were reported multiple similarities with the journal already mention but from a different perspective of the same class. The code used to classify that observation was:

“The teacher asked the students if they remembered the songs related to the body parts and asked them to stand up. The songs were played, and all the students started performing the movements singing and pointing to the body parts mentioned without much difficulty. One of the songs was played in 2 different rhythms: slow and faster. When students felt the song was faster, they got more animated and wanted to do it at the same rhythm of the song. All the students enjoyed the song and asked the teacher to repeat it again. The teacher decided to repeat one last time but warned the students that he was not going to model the lyrics. When the song began, all of them started to sing like a chorus demonstrating that they learnt most of the body parts taught.”

**Obs # 3; Y; 08/05/18; L 23-31**

In the extract of the third observation made on May 8th, it was evidenced that the student's retained the information presented in the songs in previews classes since when the songs were played students pointed to the body parts mentioned in the same rhythm of the songs by being able to do it naturally. In this manner the different songs become a routine that would be done in every class to active background knowledge and to serve as base to introduce new vocabulary; additionally, the pre-service teacher in order to complement the song would point to the body part mention to help and guide the students, this was done to create a connection between the word and the actual body. Then, the pre-service chose a song to be played faster so students had to listen and move faster as well, students were

energetically trying to follow the speed of the song which was very challenging, but it made them laugh and have fun.

While in the previous extract showed the pre-service teachers using the song to teach vocabulary and challenging students to point and sing it in different speeds, the following extract is related to how some of the students volunteered to perform the song and guide the rest of the group taking the place of the pre-service teachers; the code used is the following.

“The teacher asked the students to stand up to sing “Head, shoulders, knees, and toes”. They performed the song and some of them went to the front to model their partners. Students sang the song and got motivated when they had to do it faster. The teacher told the students they were going to play a song and they had to follow their movements. Students stood up and followed the teacher. With this activity, students were more animated and wanted to dance.”

**Obs #5; Y; 22/05/18; L27-32**

In the extract of the fifth observation made on May 18th is shown that the researcher in charge of observing the lesson noticed that during its implementation when the song was going to be used, the pre-service teachers asked for volunteers to see who wanted to perform the song and model in front of the rest of the group and what they got was an overwhelming participation from the students; everyone wanted to model the song. The pre-service teachers let the students do it and decide to challenge them to do it faster by accelerating the rhythm of the song, the volunteers did it with a very good performance with an added result of motivating the class in general. This class evidenced the positive impact that the song and the involvement of the students had in their own learning process.

The following extract is based on how by using of songs it lets students internalize the target language since it make them move and use the vocabulary they were learning, but also

it served as a manner of engagement where they were physically and mentally occupied making the process more integral; moreover, the song was catchy so they learned it by memory and they enjoyed practicing language with it.

“Those 15 mins revolved around a didactic activity following the principles of total physical response where the students by moving and singing would internalize the vocabulary taught last week. The song previously mentioned was used as an activator to engage student’s previous knowledge about the body parts and their location on their own respective bodies. Students like the song”

**Journal #2; J; 24/04/18; L7-11**

The extract made on April 4th shows that the integration of songs in the lessons as a tool to teach vocabulary supported by the total physical response theory which states that learning is more effective if the individual is entirely involved both physically and mentally in an activity. Based on that, students were completely engaged in the activities performed that began with a song, raising their motivation and increasing their interest in paying attention, if students are physically and mentally interacting with the song it may result in a way of internalization of the knowledge in a natural setting; unlike in traditional scenarios where English teaching is normally taught from a theoretical standpoint through written and oral input, but the song was proposed as a way to combine the theoretical knowledge with fun actions.

This finding is then related with the usage of specific strategies in order to facilitate the acquisition of new vocabulary and how songs can be used as a medium to achieve this objective. In an article about the role of music and songs in teaching English vocabulary to students, Kuśnierek (2016) states that music has been a big part of our society as well as in the education settings and classrooms, language teachers found that by using songs and music

students become more motivated towards acquiring a new language, in this sense it can be said that music provides a more common ground affiliated to their natural environment making that acquisition process work a lot smoother where they practice new vocabulary along with correct pronunciation, intonation and stress which is very beneficial in language learning.

Additionally, the author states that people typically find listening to songs one of the best techniques in order of achieving a foreign language; additionally, to know what a song is about, they read and translate lyrics on their own. From our personal perspective, we believe that this creates autonomous learners where they take on themselves to look for the words and learn what is said in their mother tongue while they learn new words subconsciously in the foreign language. Moreover, typically in songs words are repeated multiple times which consolidates the words in the students' repertoire.

On the other hand, different from the statement already shared, Šišková (2018) based on her findings, concluded that teaching vocabulary through music is highly effective if students have emotional attachment towards specific songs. Although music is an important element to be included in teaching, according to the author what really impacts students' learning and exceptionally expands their motivation is the special connection they develop the song, the special feeling you get when you listen to your favorite singer moves them to learn not only the lyrics, but also the story and meaning behind that song, by creating this connection between their personal feelings and the song in the target language students are able to develop language easily because the learning method is not being imposed; on the contrary, it is of their own freewill; nonetheless, the author clarifies that in comparison with the amount of vocabulary students can learn using a course book is lower than learning vocabulary from songs due to the limitations that songs presents in terms of words; however, the learning with songs results more meaningful than the knowledge they get from books.

Another conclusion arrived by the author is that music changes the atmosphere in the traditional classroom to a more social, interactive and engaging environment. We as researchers consider that one of the main purposes of introducing music into our classrooms is to create a more student friendly space where they do not feel the pressure of being in an educational setting where normally they have to meet certain standards to be recognized as well behaved students, music provides space which allows them to express their interests comfortably and are able to be whom they really are.

As a final thought, taking in mind the previous findings concluded by the two authors, they both agree that the usage of songs as an element to teach vocabulary has proved to be effective while it impacts positively the students' acquisition of knowledge and vocabulary learning.

### **5.1.3 Group division as a strategy for teaching and controlling students' behavior outside the classroom**

During the implementations of the current project there was a consideration to take in mind when developing lessons outdoors due to the lack of experience of the pre-service teachers in relation to how to work outside the classroom in an open area with a numerous group. This situation was difficult during the first sessions since the teachers were applying the strategies to control behavior that are normally used in enclosed spaces like a classroom to an open space like a courtyard. This caused that the behavioral aspect during the practical stage of the lessons turned into a problem that was affecting the development of the classes. Based on the previous scenario, it was necessary to look for a solution taking advantage of the number of teachers available to conduct sessions, it was decided that the best course of action would be to divide the large group in two making a pre-service teacher

in charge of one of them to guide the same activities while maintaining parallelism and enhance group control.

To evidence the problem and solution previously mentioned, the researchers used a series of observations and journals, which were done after each implementation, In the fourth observation made by one of the researchers, it is evidenced that the strategy was implemented, and its results impacted positively the development of the lesson, this can be evidenced in the following excerpt:

“One strategy that contributed to the teaching act being outside the classroom was the division of the group in two subgroups due to the number of students. In this way, children were closer to the teacher which facilitated teacher classroom management (voice projection and monitoring of activities); besides, students’ behavior was easier to control.”

**Obs #4; Y; 15/05/18; L58-62**

In the extract of the fourth observation made on May 15th, the researcher noted that a strategy to control behavior in an opened area was integrated during the session observed with the purpose of improving classroom management, which was effective because it improves the issues presented in the last sessions regarding group management since pre-service teachers were implementing the same strategies applied in a typical language class.

The following extract is based on the other researcher in the role of participant, the journal was made on May 8th based on another class that evidenced the same problem in the outside session of the class and the decision made by the pre-service teachers to face the problem.



“To work better and to produce a deeper impact, we decide to divide the whole group into two, this way each of us would oversee around 15 students, making it a lot easier to control and teach while conducting physical activity”

**Journal #3; J; 08/05/18; L34-36**

In the extract of the third journal made on May 8th, it was evidenced that the pre-service teachers implemented a strategy to improve the lessons by having in mind the issues presented outside in previous sessions regarding behavior; for this, it was decided that each of the two teachers implementing were going to conduct a group of 15 people in different activities such as stretching, warming up, and the practice of the sport been taught facilitating other important aspects of the class such as crowd control, noise level, instruction giving/following, voice projection, organization, and that each student had a more personalized learning process. This was a turning point to the way the lesson were being implemented because the absence of group management and behavior control strategies in the first classes were affecting students negatively in the practical session; however, with the group division strategy, the class changed positively to the point where students were able to understand clearly the instructions given and put into practice the vocabulary taught in the inside session achieving the purpose of the project.

In the following extract, the group division transcended from merely dividing a big group in two, it was decided that each group should be also monitored by students, better known as leaders for the rest of the students, this idea seemed to be effective considering that they felt more comfortable of working with their own classmates. This can be seen in the extract from the 2nd observation done on April 24th represented in the following excerpt:

“After that, teachers divided the students in two groups. In each group they selected 10 leaders (Students of the sample) to create groups of 3 people. They oversaw motivating and

guiding their partners, and they were happy because they were working with their partners helping one each other. Doing this, teacher could monitor each group performance.”

**Obs # 2; Y; 24/04/18; L24-27**

In the previous extract, it is shown that the researcher in charge of observing the lessons, noticed that the pre-service teachers decided to assign a role of leaders to certain students which were in charge of two students as a manner of reinforcing the teacher’s control over them, this decision help the group division strategy to control behavior transcend into a learning agreement where students who were involved changed from subjects to be disciplined, into individuals who corrected and demanded organization from each other in the practical sessions; a positive aspect to highlight is the fact that students who were controlling their partners were happy assuming the leader’s role, and the students being controlled it was observed that they increased their participation and improved their motivation.

In the following extract, it is explained what the pre-service teacher realized about the effectiveness the group division strategy had in the in the implementation of the classes, so it became an element that was vital to the methodology when working outside the classroom as presented in the following excerpt:

“We correct our mistakes by dividing the group in two, we separate the courtyard in two as well”

**Journal #3; M; 08/05/18; L44-48**

The extract made on May 8th shows a reflection of the pre-service teacher in his journal in which he concludes that it was better for the class to be divided into two groups in the practical session because that was the scenarios in which misbehavior affected the development of activities to the point where they had to be cancelled or postponed to another class, but also the reflection states that this strategy was implemented after a trial and error

process focused on implementing different ways of controlling large groups in opened areas, narrowing down to the one chosen which is group division resulting in the professional growth as a meaningful learning experience for the pre-service teachers when working with large groups; nonetheless, it is necessary to consider that this class was conducted by two unexperienced teachers but the ideal context, the teacher would be knowledgeable in both fields, English and Physical Education and all of the different strategies in terms of group management where the strategy used in this project can be integrated as a good option due to the effectiveness it seemed to have for us.

This finding is then related with the usage of strategies to control behavior and direct lessons outside the class by separating a large group; additionally, based on Burke (2011), when students are organized in groups, the time they spend working collaboratively becomes a more effective way that enables them to achieve a deeper learning and understanding so it can be added that this strategy of dividing students in sub groups facilitates the giving of instructions and their understanding as well as their implementation of the instructions given, different from this, others skills are develop such as team work, and social skills due to the close interaction they will have with each other, this also helps to improve the students' rapport with the teacher and other students because it becomes a more interpersonal relationship.

At the beginning of the current project implementation, the strategy of dividing the group surged as an answer to the problem of controlling a thirty five students group in an opened area; however, having a large group had other negative applications as Burke( 2011) argues because it decreases each members' opportunity to participate and often results in some members not actively contributing to the group while creating mayhem, which for the case of the current project affected the development of the activities previously plan due to their behavior.

On the other hand, Beebe & Masterson (2015) had a similar perspective about the advantages of dividing the group into smaller ones by focusing primarily on the communication within that group, which they defined as a small group of people who share a common purpose, who feel a sense of belonging to the group, and who exert influence on one another and facilitates in the completion of a task. As researchers, we concluded that the classes where we implemented the strategy already mentioned impacted positively in terms of order, group management and students' behavior that at the same time it allows students to participate actively inside each activity and allow each one of them to a more personalized interaction with the teacher enhancing communication and learning process.

## **5.2 CLIL Challenges when implementing Physical Education in L2**

### **5.2.1 Lack of verbal instructions in and outside the classroom**

The fact that verbal instructions were not given inside the classroom negatively affected students' behavior and performance out of it. Throughout the development of the implementations, the classes were divided in 30% inside the classroom to provide students input and instructions about the required language for the class and the Physical Education activities they were going to develop; and 70% outside the classroom to develop those activities in the soccer field. However, it was evidenced that in the first part of the classes inside the classroom there was a gap in terms of the language and instructions presented to the students since they were allowed to leave the classroom without a clear explanation of what they were going to do outside; therefore, the lack of instructions inside the classroom about the physical education activities in English became into an issue outside the CLIL classroom.

Students' behavior was directly affected because it was difficult to catch their attention once they were outside. For instance, being in an open space affected the teachers' ability to talk and the students' ability to listen. Most of time when they were in the soccer

field they got disperse and started talking and playing what they wanted. As instructions were not clearly stated in the classroom, when teachers tried to do it outside did not work because students were focused in other activities. Therefore, the lack of clear instructions caused the inattention of the students about the activities proposed, and this, at the same time, led to their misbehavior and disorganization.

Due to the lack of verbal instructions, students' performance in the activities was affected. In the first place, as mentioned before, as students were not warned regarding the purpose of the class outside, they tended to develop other activities such as talking with their friends, playing in the cellphone, or playing football. Hence, when teachers tried to catch their attention about the actual activities planned for the class, students got demotivated and even annoyed. On the other hand, this lack of guidance also affected the complete understanding of the activities; for example, as the giving of instructions was difficult outside, sometimes students got confused regarding how they had to develop a certain activity, and although they carried them out for a while, at the end they got demotivated and asked for some free time to do the activities they wanted. All the above can be evidenced in the following excerpt:

“The students were asked to go out to develop the activities. However, something that affected the outdoor class was that the instructions were not given inside the classroom; for this, it happened the same of the previous class: students were disorganized, and it was difficult to control them; they started talking with their partners and did not listen to the teachers' instructions”.

**Obs # 2; Y; 24/04/18; L 29-32**

The previous excerpt is a fragment of the write-up of the second observation of the project, which was conducted on April 24<sup>th</sup> in 2018 by one of the researchers. This comment was done after observing the class in which students were supposed to learn the basic action verbs (Run, Walk, Jump, and Jog). However, after doing a quick review of the topic of the

previous class (Body parts), students were asked to leave the classroom without clear verbal instructions about their behavior and the activities they were going to develop. It can be noticed that in the excerpt it is expressed that the same happened in the first implementation and that, as mentioned above, students' behavior and performance was negatively affected. After some classes, teachers tried to improve this issue as can be evidenced in the following sample:

“At 9:30 am we gave the instructions to the students inside the classroom about their expected behavior, the use of the basketball ball with the rest of people that were around and asked them to do the activities; then we took the students outside by rows to begin the warm up as a whole group, they started to walk around the courtyard”.

**Journal #5; J; 22/05/18; L 71-74**

The above excerpt is a fragment of the write up of the fifth observation conducted on May 22th in 2018. In this class, it was evidenced that even though teachers improved the giving of instructions by developing a quick reviewing of topics previously taught in classes and by providing certain guidelines about students' expected behavior when leaving the classroom; it was still a problem the fact that students did not receive clear instructions about the language and Physical Education activities they were going to develop outside the classroom.

In fact, this finding demonstrated that the giving of verbal instructions was a real challenge when implementing; hence, Massler et al. (2011) point out that when teaching through CLIL, it is necessary to create what they call a *Verbal Scaffolding*, in which teachers provide clear language with the purpose of enhancing students' participation and motivation in the activities. However, in this research, a *Verbal Scaffolding* regarding the instructions and language presented was very difficult to achieve; for this, other factors such as students' behavior and performance were affected.

Finally, it is important to highlight that the lack of verbal instructions was directly linked to what Coyle et al. (2009) call *Progression*. This term refers to the act of having a logical and organized sequence in the lesson that at the same time help to guide students towards the language and content learning. However, although researchers tried to improve the giving of instructions before leaving the classroom, it was evidenced that there was not a complete progression among all the classes implemented. Furthermore, it was needed more support by the teachers in terms of language and guidance to help students in the independent and autonomous development of the activities (Coyle et al. (2009).

### **5.2.2 Emphasis on content activities rather than in language activities**

The development of content activities affected the teaching of language activities outside the classroom. At the beginning, it was assumed that as the researchers were language teachers, the CLIL focus of the project would be language-driven; however, after implementing, it was evidenced that once students were outside the classroom most of the activities related with the English language teaching itself were disregarded because the focus was the Physical Education activities.

Based on the above, it is relevant to highlight that the content focus of the project was not only caused by the students' interest on Physical Education activities, but also because of teachers' difficulty to develop the classes as planned. Although before the implementation at the school it was conducted a planning process in which the integration of content and language activities were carefully designed, it was not developed in the planned manner because the Physical Education subject was so practical that the linguistic part was disregarded without taking advantage of this practicality to promote the language learning. All the previous can be evidenced in the following sample:

“...All the students were jumping rope or at least playing with the rope achieving the physical purpose of the activity which was to jump rope and create a healthy life habit; however, the linguistic/English part was not accomplished since only a few were using the language and those who were, were only using one word “jump” or “jumping”. It was almost impossible to push the students to use English when they are spread-out through the courtyard.

**Teacher:** What are you doing? What is this? (Teacher jumps)

**Students:** no answer”.

**Journal #2; J; 24/04/18; 94-101**

The above excerpt is part of the write-up of the second implementation done at the school on April 24<sup>th</sup>. In this class, students were supposed to learn and practice the action verbs (Walk, Jog, Run, and Jump); therefore, it was planned that after a short introduction about these action verbs in English, they would develop kinesthetic activities in which they could perform them outside; however, although students successfully carried out the action verbs, they were not aware of the meaning of these actions in English. For instance, in the sample can be observed that students were engaged jumping with the rope; nonetheless, when they were asked about the name of the action in English they did not have an answer since they were not focusing on the language learning. For this reason, teachers were aware of this situation and tried to improve the teaching methodology for the next classes as can be observed in the following excerpt:

“...At 9:20 am, the teacher organized students in a line and showed them a flashcard with the word WALK. Students automatically started to perform the action of walking for few seconds. The second action verb was JOG. This time, the teacher asked the students the following:

**Teacher:** what is this? (JOG)

**Student 1:** “*Correr*”

**Student 2:** “*No, trotar!*”

**Observation #5; Y; 22/05/18; L 71-77**



In this example extracted from the fifth observation conducted on May 22th can be evidenced the integration of a Physical Education activity with a language one. In this class, students not only had to read and pronounce the word teachers showed them on a flashcard, but also perform that action. Each student was shown a different action verb in which they also had to say the meaning of the word in Spanish demonstrating understanding.

The issue regarding the integration of Physical Education activities with English language activities was found by Coral and Lleixá in 2014. Similar to our study, in their findings they presented the dilemma emerged about what they called *Tareas atractivas* versus *Tareas Efectivas*. They pointed out that when children were developing activities that were fun for them, such as the ones of Physical Education, the *Tareas efectivas*, which refer to the language activities, were affected because students would prefer the ones for which they feel attracted. Although in this study throughout the progression of the classes it was possible the teaching of English through Physical Education activities, it was evidenced the students' desire for having fun and for developing the Physical Education activities by the sole act of enjoying them without having to worry about their meaning in English. Based on what Coral and Lleixá (2014) found in their research, it can be stated that to some degree one of the subjects may be affected because of the focus given.

### **5.2.3 Lack of Balance among the 4 Cs of CLIL**

One of the 4 Cs of CLIL was not integrated at the same level as the others. Developing CLIL lessons implies the integration of the 4 Cs in each class; for this, in most of the classes it could be evidenced the integration of activities that promoted cognition, content, and communication; however, it cannot be said the same with Culture because it was the one that had less opportunity to be integrated. Throughout the implementations, topics such as body parts, action verbs, commands, and basketball vocabulary were learnt by students;

nevertheless, none of these topics were explicitly linked to a cultural aspect of the target language, becoming another challenge when implementing CLIL.

Culture was not successfully integrated due to researchers' lack of planning experience. Before the implementations, it was developed a planning process in which for each lesson plan it was specified the way in which the 4cs were related to each class; however, since the beginning culture was an issue. While planning, researchers realized that the topics previously mentioned could be carried out without the integration of culture; for that, the emphasis was given to the rest of the three Cs (Cognition, Content, and Communication), and Culture was disregarded. All the above can be evidenced in the following excerpt.

“One of my concerns regarding this planning process is that when trying to integrate and specify the 4 Cs in the lesson plans it cannot not be completely done with the C that stands for Culture since the topics we have planned can be taught without being explicitly linked to a cultural topic”.

**Obs #1; Y; 17/04/28; L 10-13**

The previous sample was part of the first observation conducted at the school in which it was evidenced the gap in terms of the 4 Cs in the development of the class. This comment was made after analyzing that inside and outside the classroom students conducted activities in which they learnt the meaning of some body parts, they associated a picture to each word, and participated using the language; in other words, it can be evidenced the materialization of Content, Cognition, and Communication as some of the 4 Cs of CLIL; however, Culture cannot no be seen in the class. Contrary to the awareness given to the challenges regarding the giving of instructions and the emphasis on content activities over the classes, this challenge about the integration of Culture as one of the 4 Cs in the project could not be improved throughout the implementations. The above can be supported with another excerpt.

“When we talk about culture in relation to basketball as sport, a lot could be taught but in this lesson there was an interruption of the explanation of the vocabulary so the teaching of the content was incomplete, although the intention was to talk about the American culture and the importance that this sport has for the American country, the in-service teacher was interested on working with this sport in a more practical way instead of letting students learn about any cultural background, so the planning was limited to practicing in the courtyard and talking about some technical considerations regarding techniques and rules”.

**Journal #4; J; 05/18; L 39-45**

The above excerpt is a fragment from the fourth journal developed by the researchers on May, in which it is evidenced that there is no change from the beginning of the implementation to the end regarding the integration of culture. Furthermore, it is also explained that due to limitations of the study, not only Culture but Content was also affected deviating the expected balance of the CLIL lesson.

Based on Coyle et al (2010), in a CLIL lesson the 4 Cs should act like a framework for the planning and for the implementation stage complementing one another; that is why the balance is important. Unfortunately, in this project achieving the goal of integrating Culture in the classes for students to get familiar not only with the language but with the cultural features of it was not possible. Inevitable, Culture was disregarded throughout the project. Similarly, Coral and Lleixá (2014) found in their research that when teaching English and Physical Education it was a challenge maintaining the balance between the 4Cs.

### **5.3 Students' progress regarding content acquisition before and after lesson implementations.**

At the beginning as well as at the end of the process of implementation of the project in the primary school, a diagnostic test was conducted with two main objectives; the first one

was to determine what students knew in relation to physical education and English content using certain base topics and vocabulary and the second, was to compare the impact of the implementation conducted by the researches to evaluate their progress in language acquisition and vocabulary learning using a similar test at the end of the classes conducted.

To teach students content from Physical Education subject through CLIL using English, the researchers needed to know the students' knowledge as well as their linguistic capacity in the target language since working with CLIL requires a certain previous process to be effective; to do so, there was a necessity of implementing an instrument that allow the researchers to gathered data related to what students know but at the same time that instrument had to allow the researchers to measure the students' process in order to have concrete data to formulate conclusions after the implementation of the classes. After many considerations it was determine that implementing a diagnostic test was the appropriate instrument to be applied in the research due to the quantitative amount of data it provides about the students' progress in term on knowledge acquired before and after the process.

In relation to the application and design of the instrument to collect data, in this case the diagnostic tests, it was applied to 10 students selected through a random sampling method from which 2 girls and 8 boys were chosen. The data from the diagnostic test implemented at the begin and after the implementations was gathered to answer the objective of the research which aimed to determine students' language progress through the integration of Physical Education content and English.

In that sense, this finding reports the results from the diagnostic test before and after its implementation and they will be compared to evidence the impact and progress on students regarding content knowledge in English and Physical education.

Before starting with the presentation of the results, it is important to clarify that the diagnostic test had changes from its first application in comparison to the second one done at the end of the implementations. In the first, the diagnostic test contained three sections with a different number of items that evaluated action verbs, body parts, vocabulary, and verbs related with a specific sports; nonetheless, taking into consideration that the implementation of the classes had some unexpected changes in matter of topics, the second version contains a different number of items which corresponded to the content taught throughout the lessons, this consideration will be explained in detail later.

To clarify, from this point on first diagnostic implemented will be named *Diagnostic test 1*, and the second diagnostic implemented will be named *Diagnostic test 2* to facilitate comprehension; moreover, the presentation of the results will be organized in the following order:

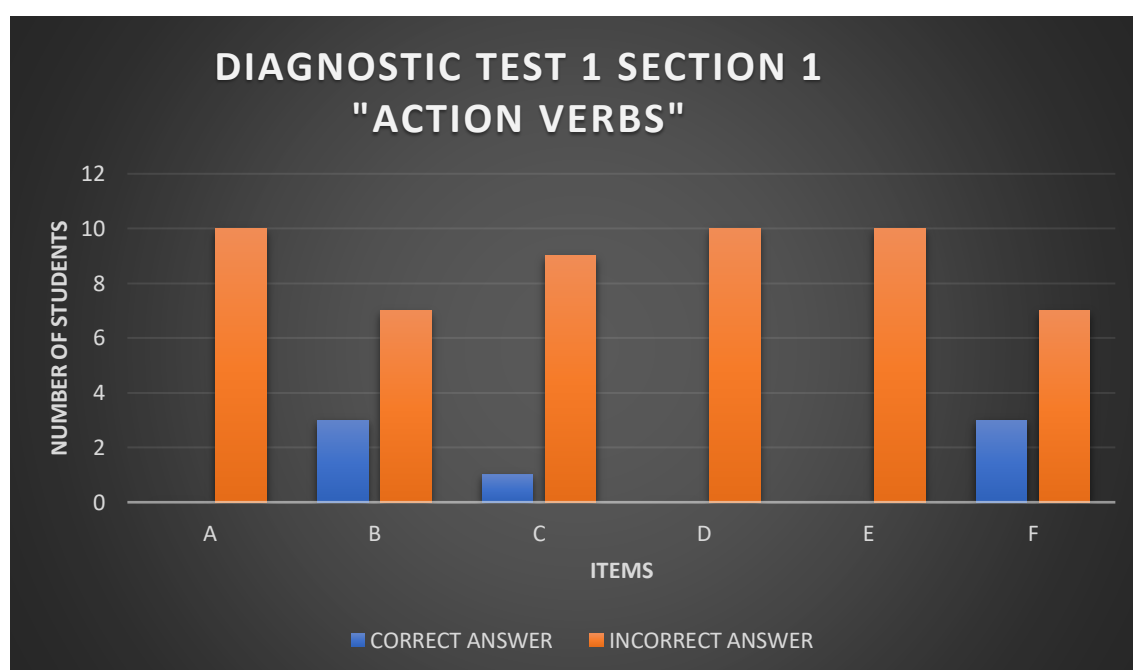
First, the three sections in the *Diagnostic Test 1* which will be accompanied by a graph which represents the number of correct and incorrect answers correlated with the number of students followed by a short explanation about it.

Second, the presentation of the three sections of the *Diagnostic Test 2* which will be accompanied by its corresponding graph representing the number of correct and incorrect answers correlated with the number of students followed by its short analysis.

Third, both diagnostic tests will be presented, and all the results obtained in each one of their sections will be compared; these comparisons will include the respective graphics and their corresponding analysis as well; finally, this finding will be discussed with different authors with similarities in the field.

### ***Diagnostic Test 1 Results***

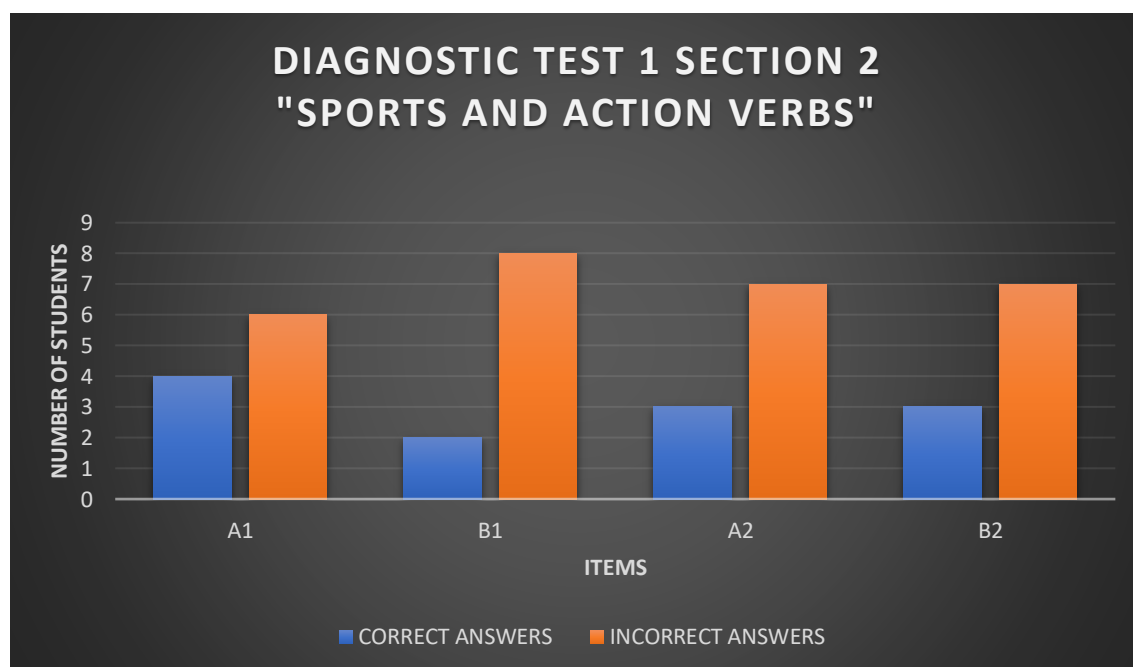
The following section aims to present the results obtained from the *Diagnostic test 1* which was composed by three sections with a different number of points where the students' knowledge was evaluated in the following aspects; first, students' knowledge about Action Verbs in a general perspective; second, the students' knowledge about Sports and the action verbs related to them; third, the students' knowledge about body parts vocabulary; nonetheless, in the following graphic there are placed the number of correct answers that will be colored in blue and the number of incorrect answers that will be colored in orange to facilitate comprehension, the results were obtained from the students randomly chosen where they answered six different items in the first section; in the graphic they are placed as A (1<sup>st</sup> item) to F (6<sup>th</sup> item); The first section was related to action verbs and the results were the following:



Based on the graphic it can be interpreted that the results were mainly negative because the orange bars, which represents the incorrect answers, is the one with more

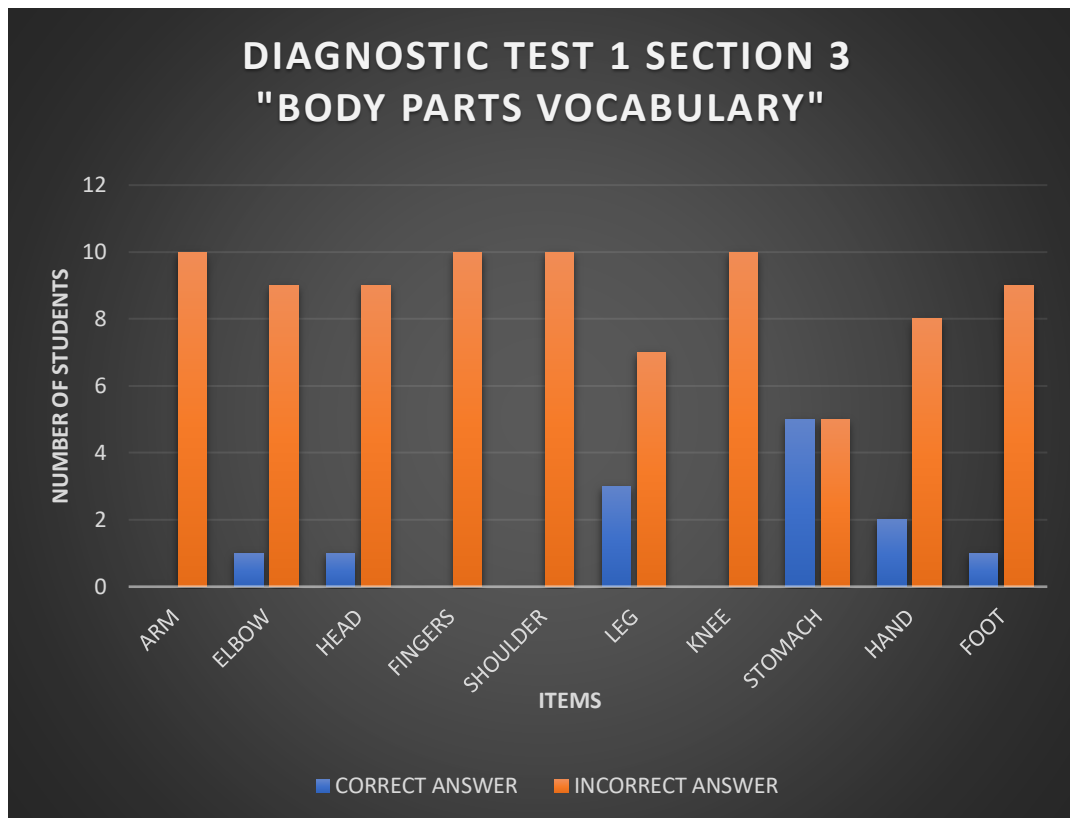
presence, perhaps due to the lack of knowledge students had in relation to vocabulary about action verbs.

Now, the following graphic aims to presents the results obtained from students regarding the second section of the *Diagnostic test 1*, related to Sports and Actions Verbs, the points **A1** and **B1** corresponds to the points about **Sports** and the points **A2** and **B2** corresponds to **Action Verbs** about related to Sports. The results were the following:



From the graphic it can be interpreted that the results were mainly negative as well as the previous graphic, considering that only four students were able to answer correctly almost the four points proposed in the section, the rest of the students answered incorrectly. The orange bar is still persistent in the results, so students were not prepared enough for answering maybe due to their lack of preparation and teaching of the vocabulary presented.

To finish with the presentation of the graphics related to the *Diagnostic Test 1*, the following graphic aims to presents the results obtained from students regarding the third section of the test about **Body Parts** vocabulary which presents the specific words proposed in the test and the number of students who answered them correct and incorrectly, the results were the following:



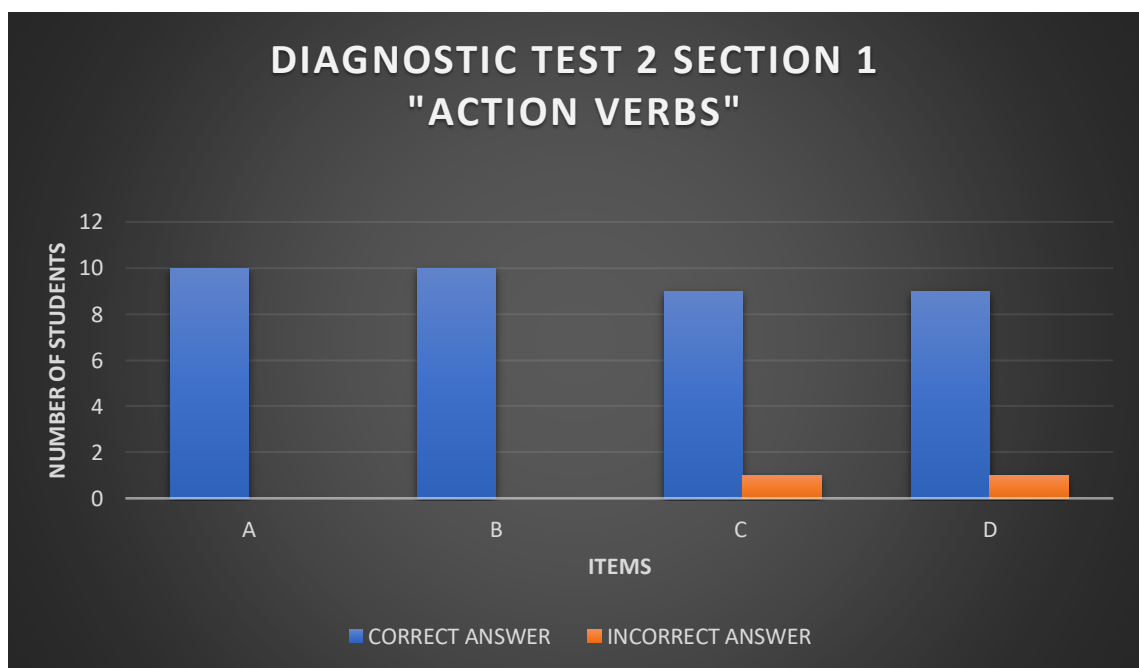
From the graphic, it can be interpreted that the results in this section are still negative since only five students answered correctly “Stomach” and only three “Leg”, the rest of the answers are represented by the orange bar which is the one who presents the incorrect answers, as researches we understand that for students this section was probably the most challenging due to their age and knowledge about vocabulary about the human body in English.

### *Diagnostic Test 2 Results*



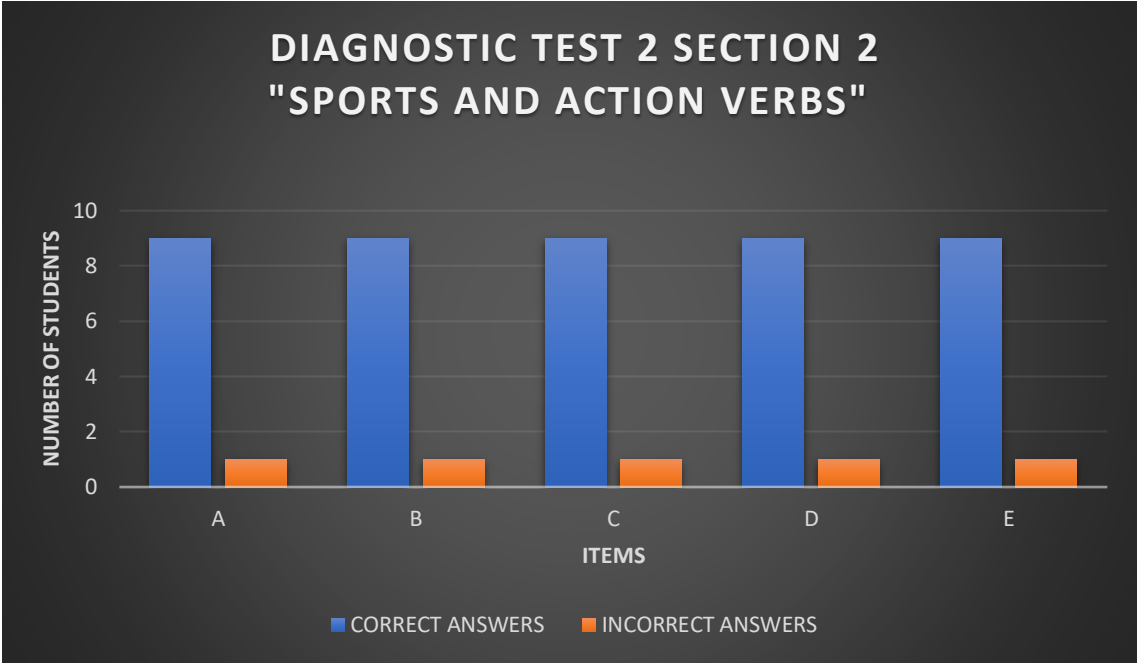
From now on, the researchers of the current project aim to present the results from the *Diagnostic Test 2* in the same order of ideas as done with the *Diagnostic Test 1* by showing the results obtained from students about the number of correct and incorrect answers per section.

Before sharing the results of the students in the Diagnostic Test 2, it is necessary to clarify that after two months of implementation of lessons, the same sections as in the first were used; however, the number of points per section changed since they had to be related to the content taught during the implementations; for example, the section one of the *Diagnostic Test 1* had more points than the section one for the *Diagnostic Test 2* due to changes done by the researchers influenced by the in-service teacher, having this point clear, the results for the first section in the *Diagnostic Test 2* were the following:



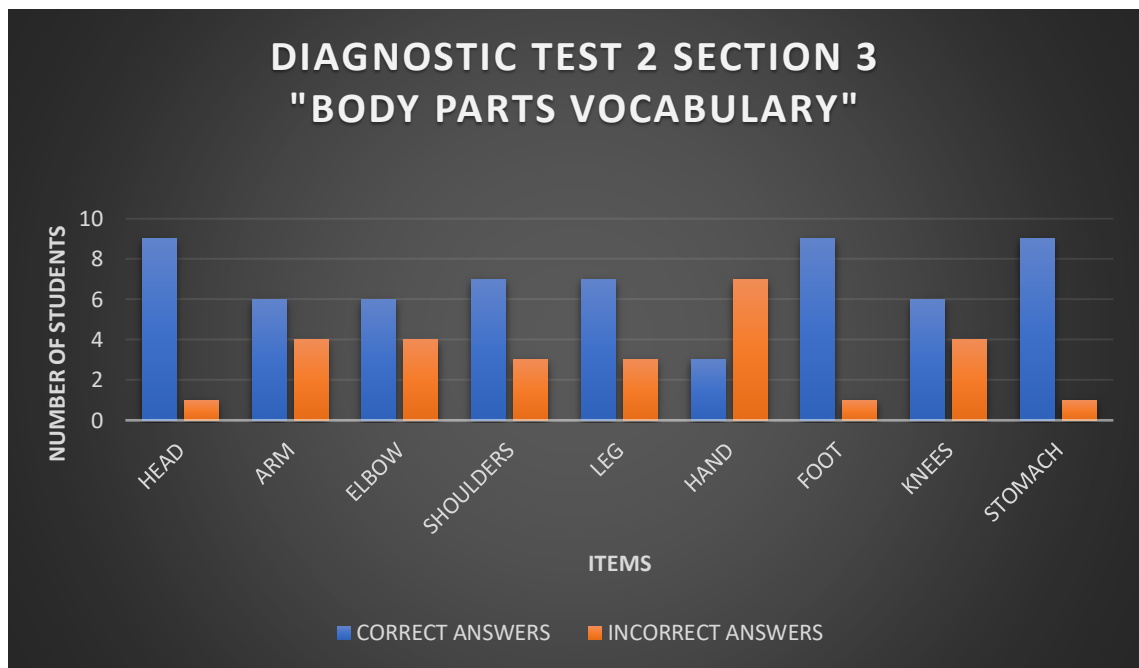
From the graphic it can be stated that most students answered correctly the four points proposed in the test, which means that at the moment of presenting it they had the appropriate background knowledge to respond correctly.

The following graphic aims to present the record of the answers obtained from students in the second section of the *Diagnostic Test 2*, the results were the following:



From the previous graphic in can be said that as well as in the section one, students had an amazing performance in the five points proposed in the test where only one of the students answered incorrectly, but the majority developed the exercise perfectly showing a great domain in this section.

To conclude with the presentation of the results obtained in the Diagnostic Test 2, the following graphic aims to present the record of the answers gotten in the third section of the test, the results were the following:



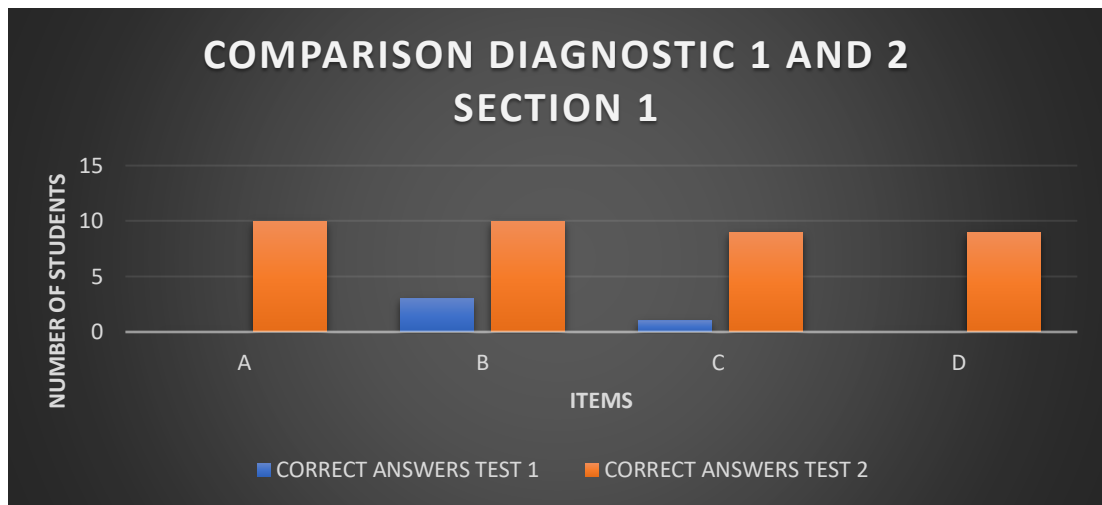
Based on the previous graphic, the results varied due to the degree of difficulty of the task, for students this seem to be the most challenging section; nonetheless, the results are still positive considering that the blue bar is more consistent than the orange bar, which means that from the ten students, four students had difficulty in answering certain items; for example, the items that had the vocabulary “hand, knees, elbow and arm” were the most difficult ones, the rest of students were able to answer correctly the points presented in the test.

### ***Comparison between sections of Diagnostic Test 1 and 2***

The following section aims to share the comparisons of each of the sections to have an integral perspective of the development of the students before and after the implementations.

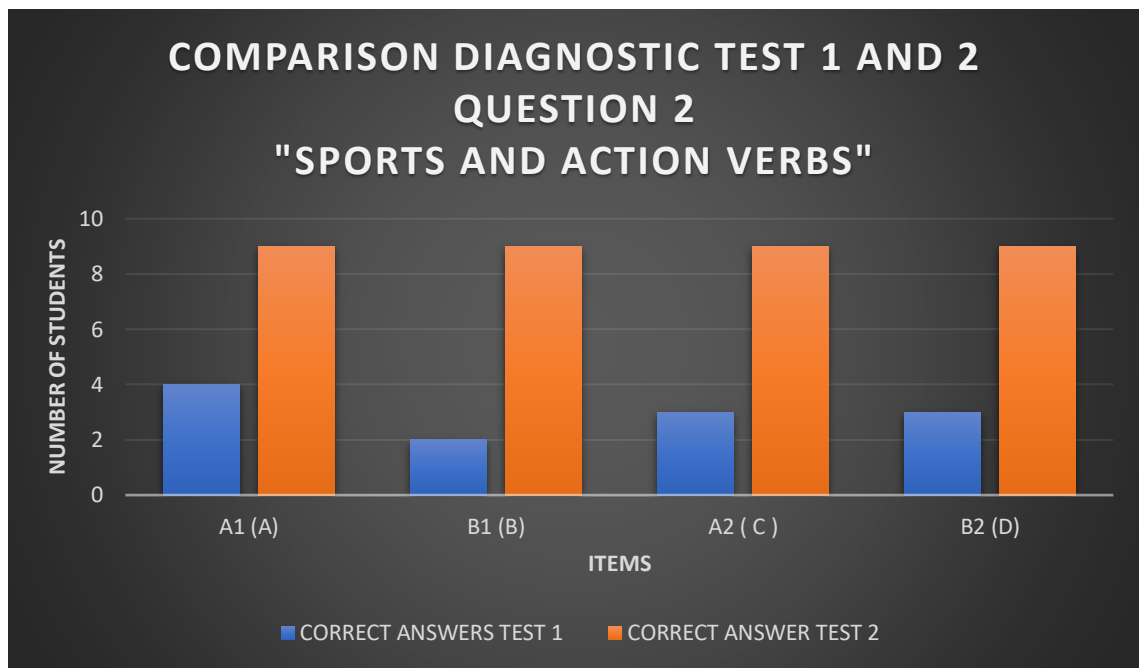
Before starting, it is important to clarify that the graphics will contain all the points included in both tests, and the colors that identified the correct answers changed, from now on, the correct answers from the ***Diagnostic Test 1*** will be represented by the blue bar, but for the case of the correct answers from the ***Diagnostic Test 2***, the bar will be colored in orange.

The following graphic compares the results obtained per item in the first section about action verbs of both diagnostic tests to see if the students improved.



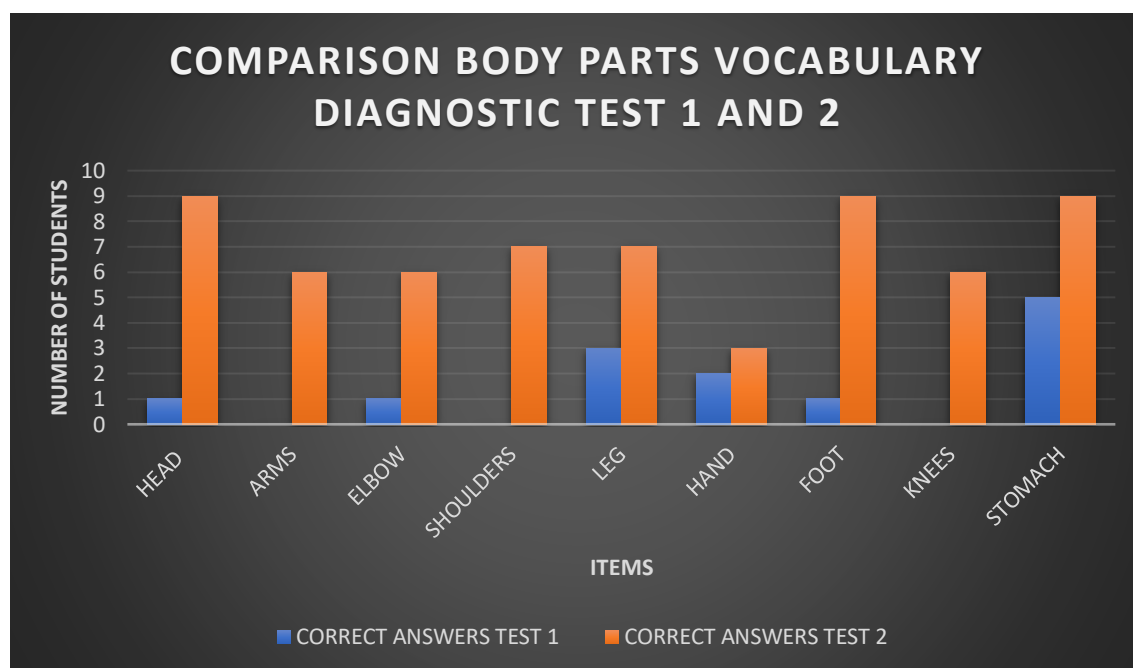
Based on the graphic, it can be said that there was a significant improvement from the test implemented at the beginning, where the results were mainly negative in relation to the test implemented at the end of the implementations, it means that students learned the vocabulary taught during the sessions where the researchers conducted the classes; in short words, the use of the CLIL methodology by the pre-service teachers impacted positively the students' understanding and domain of the vocabulary presented in this particular section.

The following graphic aims to present the results obtained from both, *Diagnostic Test 1* and *Diagnostic test 2* in the section two related to sports and actions verbs about them; the results were the following:



Based on the graphic, it can be said that the development of the students in this section is evident as well as in the first section because if the results of the correct answers obtained in the Diagnostic Test 1 and 2 are compared, there is a big difference, it can be stated that for this section, students were able to answer correctly to the test which is a result of learning.

To conclude with the comparisons, the following graphic aims to present the results obtained in both tests regarding the third section about body parts vocabulary, the results were the following:



From the graphic it can be said that although the results are variable, the main conclusion is that students improved the knowledge they had about body parts, since the bar in orange is the more visible one in the graphic, it means that most of the students evaluated had a better performance in comparison to the results obtained in the test implemented at the beginning.

Following the guide and techniques proposed by Coral & Lleixà (2014) in their research about the successful interaction between physical education and English as a foreign language, it was recommended that to address both language improvement and motor learning achievements in PE-in-CLIL settings, further research was needed in the field; in this order of ideas, the current project came into mind with the purpose of determining the impact of teaching physical through English by incorporating CLIL as the methodology which based on the results previously shared, it can be concluded that using this type of process and the union of physical education and English through the CLIL methodology provides positive results in terms of students' language performance.

On the other hand, in the longitudinal study by Surmont et al. (2016) two Math classes were involved; one of them followed the CLIL methodology and the other one followed the traditional one during a year; during that period of time, multiple tests using the same design were applied to the two classes. After, the authors compared the results gathered through the tests, it was concluded that in the group where CLIL was applied, the students' language and content performance experienced a significant higher progress in comparison to the one of the traditionally schooled pupils. In the case of the current research, similar results were observed in a short period of time where based on the diagnostic test implemented it was observed how the students' language performance improved in only six weeks of implementation.

## **6. PEDAGOGICAL IMPLICATIONS**

After conducting the study, it was evidenced that for an effective teaching of Physical Education in English through the CLIL model there are some pedagogical strategies and considerations underlined that contribute to facilitate the development of the teaching process; therefore, depending if the class is developed inside or outside the classroom, the use of visual aids, the use of songs, the group division, the giving of instructions, the balance among activities and the 4 Cs are essential factors.

Most of Physical Education classes are conducted outside the classroom; however, for a project like this in which it is also immersed the language learning through the CLIL method it is important to dedicate the first part of the class inside the classroom. Doing this, it is essential the implementation of some strategies to catch students' attention while being inside of it; in this sense, the use of audio-visual material is a suitable option. For this, it is important to engage students through flashcards, videos, or songs the few minutes they are inside the classroom to introduce and to practice new and previous knowledge. Using these

tools directly contribute to students' participation and teachers' explanation of content and language activities before leaving the classroom.

Furthermore, it is indispensable that while being inside the classroom, teachers take advantage of this time to establish clear and explicit verbal instructions about the activities that will be conducted outside the classroom. For instance, teachers need to specify what language and what content activities will be developed, and why and how they can carry them out. Besides, it is important that before leaving, teacher confirm understanding asking students to repeat all the instructions and information previously mentioned. In this way; it can be avoided students' demotivation and distraction facilitating their performance.

On the other hand, once students are outside the classroom, there are some other considerations that cannot be disregarded. The use of visual material such as flashcards keep playing an important role. Being in an open space requires not only verbal instruction but a visual representation of it as well; hence, showing students flashcards with pictures and flashcards with the word in L2 contribute not only to the understanding and integration of content but also language activities as it is proposed by the CLIL model. Moreover, in those cases in which the group of students is numerous, group division is an excellent strategy because the teaching process becomes more personalized.

Lastly, for further investigation, it is necessary the integration of the 4 Cs as a balance to support the implementation of CLIL. Although for this project it was conducted a planning process to integrate the 4 Cs, the C of culture was disregarded since the beginning. In this sense, for future researchers it would be interesting to find a way to integrate it at the same level of the others.

This project arose as an innovative idea in which there was a rigorous and systematic process before, while, and after its implementation. The findings of this study contributed to the language teaching field; nevertheless, it is an area that still need to be widely explored in



our context focusing not only on the linguistic impact but also in other specific variables; for instance, what other teaching strategies can be used? What content topics are better for teaching both subjects Physical Education and English? Should the project be developed inside and outside the classroom? And how can be ensured a balanced integration of the 4 Cs in all the classes? These could be some further research questions for research studies concerning CLIL.

## **7. LIMITATIONS OF THE STUDY**

The present study had several limitations which were presented, mainly, due to the lack of practical experience of the pre-service teachers regarding the usage of strategies related to group management to control a large group in an opened area like the courtyard, the timing of the activities proposed during the sessions, the planning process and the integration 4 Cs in the activities when teaching a Physical Education in English.

Regarding the first limitation based on group management, the pre-service teachers did not have enough experience to face a large group in a different setting to what they are used to like the physical education one, where the biggest problem was specifically the giving of instructions and the organization of students when developing practical activities in an opened area. These problems arose in the implementation since the pre-service teachers applied the strategies normally used in a closed setting like the language classroom where students are most of the time sitting in specific spot; however, they did not consider that the students in opened spaces tend to spread around making communication very challenging.

In the case of the second limitation presented during the implementation of the lessons, the timing assigned to each inside-outside task proved to be inaccurate since the design of the activities did not contemplate the internal factor presented in the classroom such as the thirty

minutes for free time and the reading time; in addition, the students capacities were not considered due to the fact that the pre-service teachers did not had enough interaction with the group before the implementations of the classes, so the planning did not include the students' performance rate in relation to the time they require for completing each activity. This affected how the classes were developed as well as the pacing of the activities inside and outside the class.

In terms of the third limitation faced during the planning and execution of the activities, it was found that incorporating the four Cs of CLIL regarding content, Communication, Culture and cognition in each of the activities was challenging because it was not possible to include the four of them in the same topic; for example, content was integrated in the themes developed like basketball; however, communication when teaching basketball was very limited due to the students' capacity to use the language; culture was not integrated in most of the thematic because the lessons had to be focused on teaching vocabulary due to the limited time which was only six sessions of one hour and a half each. Moreover, the topics and the way they were going to be taught were influenced by the schools' curricular guidelines as well as the in-service teachers' recommendations.

In relation to the above, the overall problem that affected the integration of the four Cs was the pre-service teachers' lack of knowledge on the application of them in a practical class like physical education, which is conceived as a subject that emphasizes more on physical activity and motor development whereas English is more theoretical and cognitive based.

For future references to get better results, researchers should consider having a basic knowledge of both, physical education and English teaching apart from good group management techniques inside and outside the classroom; the length of the implementation should also be considered.

## 8. CONCLUSIONS

Based on the previous, it can be stated that when teaching Physical Education in English through CLIL emerged different findings that led to the following conclusions.

In relation to the students' understanding, it was determined that when using supporting materials students can have a wider perspective of the units being taught in a lesson; specifically, the elements of a new code different from the mother tongue of the students. For this project, using flashcards inside and outside the classroom was very important since it facilitated students' comprehension of topics taught as well as the vocabulary presented. Flashcards included different types of references, some of them were images and some other were written language, so they allowed students to get the idea and meaning conveyed by the teacher in different forms. Furthermore, using both and making relationships among them in certain activities outside the classroom was significant because it facilitated the group activities development such as the warming up section and the practical activities oriented to the competition.

When working with children in physical activities, it was concluded that it is a good idea to include songs with two purposes. The first one is to prepare students mentally and physically to develop activities with their bodies outside the classroom taking advantage of their energetic personalities as children; and the second purpose is to include the target language in the songs chosen to have them mentally and physically involved in the learning process of a language; this means that if the objective is to enhance the students' cognitive skills it is a good idea to make them produce language by following a song they like while they improve their listening skills in the process.

In relation to one of the research questions stated at the beginning of the project regarding the challenges when implementing CLIL, it was found 3 factors that affected the

development of the process. In the first place, it was found that verbal instructions are essential for the organization and development of the Physical Education and language activities. Working with children implied having a systematic ability to give instructions in the right place and at the appropriate time. Therefore, verbal guidance and giving of instructions directly affected students' behavior and performance leading to the appearance of other challenges when implementing.

In relation to the above, it was evidenced that the teaching of content activities acquired major importance than the language ones affecting the CLIL balance. Factors that contributed to this finding was teachers' lack of teaching experience and students' interest in the development of the physical Education class without paying attention to the language. Throughout the implementations, teachers raised awareness on this issue; however, there were no major changes, which means that the balance proposed by CLIL among the language and content subject could not be reached.

The last challenge found was related to the lack of presence of one of the 4 Cs in the project. Even though in the implementations it was noticed the integration of Content, Communication, and Cognition in most of the activities presented to the students; the cultural knowledge in the learning process was barely considered. Although the topics to be taught were limited, it is worth to say that the gap arose since the planning process in which Culture was disregarded in the design of activities.

Finally, based on the graphics of the results gathered through the test, it was concluded that it is a fact that the students improved their understanding as well as their domain on the topics taught and it can be evidenced statistically proving that teaching physical education in English impacts positively the process of language learning as well as the language performance on students.

## **9. APPENDICES**

See appendices in the following link:

<https://drive.google.com/drive/folders/1suVnpwlttMhFD84RVhn8U0QTPqt1cKhN?usp=sharing>

## REFERENCES

- Akaranga, S. I., & Makau, B. K. (2016). Ethical considerations and their applications to research: A case of the University of Nairobi. *Journal of Educational Policy and Entrepreneurial Research*, 3(12), 1-9. Retrieved from [https://profiles.uonbi.ac.ke/kuria\\_paul/files/429-825-2-pb.pdf](https://profiles.uonbi.ac.ke/kuria_paul/files/429-825-2-pb.pdf)
- Beebe, S. A., & Masterson, J. T. (2015). *Communicating in small groups: Principles and practices*. Pearson
- Bentley, K. (2010). Knowledge of CLIL and principles of CLIL. *The TKT Course CLIL Module* (5-9). Retrieved from [http://assets.cambridge.org/97805211/57339/excerpt/9780521157339\\_excerpt.pdf](http://assets.cambridge.org/97805211/57339/excerpt/9780521157339_excerpt.pdf)
- Borgatti, S. (n.d.). *Introduction to Grounded Theory*. Retrieved June 12, 2018, from <http://www.analytictech.com/mb870/introtoqt.htm>
- Burke, A. (2011). Group work: How to use groups effectively. *The Journal of Effective Teaching*, 11(2), 87-95. Retrieved from [https://uncw.edu/jet/articles/Vol11\\_2/Burke.pdf](https://uncw.edu/jet/articles/Vol11_2/Burke.pdf)
- Bušljeta, R. (2013). Effective use of teaching and learning resources. *Czech-Polish Historical and Pedagogical Journal*, 5(2), 55-69. doi: 10.2478/cphpj-2013-0014
- Cameron, L. (2001). *Teaching languages to young learners*. Cambridge University Press.
- Cardenas, J. (1993). Intercultural development research association: Current problems in bilingual education: Part 1. Retrieved September 13, 2017, from Intercultural Development Research Association website: <http://www.idra.org/resource-center/current-problems-in-bilingual-education-part-i/>

- Cardenas, J. A. (1995). Intercultural Development Research Association: Current problems in bilingual education: Part 2. Retrieved September 13, 2017, from <http://www.idra.org/resource-center/current-problems-in-bilingual-education-part-ii/>
- Colombia Aprende. (n.d.). Colombia Bilingüe. Retrieved September 13, 2017, from <http://www.colombiaaprende.edu.co/html/directivos/1598/article-76053.html>
- Council of Europe. (2001). *Common European framework of reference for languages: Learning, teaching, assessment*. United Kingdom: Press Syndicate of the University of Cambridge.
- Coral, J., & Lleixà, T. (2014). La enseñanza de la Educación Física mediante el enfoque educativo CLIL: la resolución de los dilemas profesionales surgidos durante un proceso de investigación-acción. *Movimiento*, 20(4), 1447–1472. Retrieved from [https://www.researchgate.net/publication/270284981\\_LA\\_ENSEÑANZA\\_DE\\_LA\\_EDUCACION\\_FISICA\\_MEDIANTE\\_EL\\_ENFOQUE\\_EDUCATIVO\\_CLIL\\_LA\\_RESOLUCION\\_DE\\_LOS\\_DILEMAS\\_PROFESIONALES\\_SURGIDOS\\_DURANTE\\_UN\\_PROCESO\\_DE\\_INVESTIGACION-ACCION](https://www.researchgate.net/publication/270284981_LA_ENSEÑANZA_DE_LA_EDUCACION_FISICA_MEDIANTE_EL_ENFOQUE_EDUCATIVO_CLIL_LA_RESOLUCION_DE_LOS_DILEMAS_PROFESIONALES_SURGIDOS_DURANTE_UN_PROCESO_DE_INVESTIGACION-ACCION)
- Coyle, D., Holmes, B., & King, L. (2009). Towards an integrated curriculum – CLIL National Statement and Guidelines. The Languages Company. Retrieved from <http://www.rachelhawkes.com/PandT/CLIL/CLILnationalstatementandguidelines.pdf>
- Coyle, D., Hood, P. & Marsh, D. (2010). The CLIL tool kit: Transforming theory into practice. *The CLIL tool kit*. Retrieved from [https://www.unifg.it/sites/default/files/allegatiparagrafo/20-01-2014/coyle\\_hood\\_marsh\\_clil\\_toolkit\\_pp\\_48-73.pdf](https://www.unifg.it/sites/default/files/allegatiparagrafo/20-01-2014/coyle_hood_marsh_clil_toolkit_pp_48-73.pdf)

- Cruz, S., & Mosquera, S. (2017). *Using visual aids to teach grammar to children in a public school* (Tesis de Pregrado). Retrieved from <http://repositorio.utp.edu.co/dspace/bitstream/handle/11059/7894/4282H659.pdf?sequence=1&isAllowed=y>
- Denzin, N. K., & Lincoln, Y. S. (2005). *The Discipline and Practice of Qualitative Research, The sage handbook of qualitative research* (1-9). London: Sage Publications.  
Retrieved from [https://www.sagepub.com/sites/default/files/upm-binaries/40425\\_Chapter1.pdf](https://www.sagepub.com/sites/default/files/upm-binaries/40425_Chapter1.pdf)
- Dörnyei, Z. (2007). *Research methods in applied linguistics, quantitative, qualitative, and mixed methodologies*. New York: Oxford university press.
- Gabillon, Z. & Rodica, A. (2015). Content and language integrated learning: In search of a coherent conceptual framework. *The European Conference on Language Learning*, 311-324. Retrieved from <https://halshs.archives-ouvertes.fr/halshs-01199137/document>
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: strategies for qualitative research*. Retrieved from [http://www.sxf.uevora.pt/wp-content/uploads/2013/03/Glaser\\_1967.pdf](http://www.sxf.uevora.pt/wp-content/uploads/2013/03/Glaser_1967.pdf)
- Harmer, J. (2007). *How to teach English*. Harlow: Pearson Longman.
- Howard, A., et al. (2016). A comparative study of English language teacher recruitment, in-service education and retention in Latin America and the Middle East.  
Retrieved September 13, 2017, from <https://www.teachingenglish.org.uk/sites/teacheng/files/G051-ELTRA-paper-a->



comparative-study-of-english-language-teacher-recruitment-education-and-retention.pdf

Hurtado, M. F. (2016, Marzo 10). Falta plata para la más educada. *Revista Semana*. Retrieved from <http://www.semana.com/educacion/articulo/presupuesto-para-la-educacion-en-colombia/496078>

Kuśnerek, A. (2016) The role of music and songs in teaching English vocabulary to students. *World Scientific News*, 43(1), 1-55. Retrieved from <http://www.worldscientificnews.com/wp-content/uploads/2015/10/WSN-431-2016-1-55.pdf>

Larkin, M. (2002). Using Scaffolded Instruction to Optimize Learning. Retrieved September 10, 2017, from <https://www.ericdigests.org/2003-5/optimize.htm>

Lasagabaster, D. & Sierra, J. (2009). Language attitudes in CLIL and traditional EFL classes. *International CLIL Research Journal*, 1 (2) 4-17. Retrieved from <http://clil.web.auth.gr/links/Lasagabaster.pdf>

Linares, A. (2011, April 1). El inglés se enseña todavía de forma muy arcaica. *El tiempo*. Retrieved from <http://www.eltiempo.com/archivo/documento/MAM-4479844>

Mariño, C. (2014). Towards implementing CLIL (Content and Language Integrated Learning) at CBS (Tunja, Colombia). *Colombian Applied Linguistics Journal*, 16(2), 151-160. Retrieved from <http://revistas.udistrital.edu.co/ojs/index.php/calj/article/view/5374/9448>

Marsh, D. (2012) *Content and Language Integrated Learning (CLIL) a development trajectory*. Córdoba: Servicio de Publicaciones de la Universidad de Córdoba.

Retrieved from

[helvia.uco.es/xmlui/bitstream/handle/10396/8689/2013000000658.pdf? sequence...](http://helvia.uco.es/xmlui/bitstream/handle/10396/8689/2013000000658.pdf?sequence...)

Massler, U., Ioannou-Georgiou, S., & Steiert, C. (2011). Effective CLIL Teaching Techniques. In Ioannou-Georgiou, S. & Pavlou, P. (Eds.), *Guidelines for CLIL Implementation in Primary and Pre-primary Education* (66-68). Retrieved from [http://arbeitsplattform.bildung.hessen.de/fach/bilingual/Magazin/mat\\_aufsaeetze/clilimplementation.pdf](http://arbeitsplattform.bildung.hessen.de/fach/bilingual/Magazin/mat_aufsaeetze/clilimplementation.pdf)

Merriam, S. (1998). *Qualitative Research and Case Studies Applications in Education*. San Francisco: Jossey-Bass. Retrieved from <http://www.appstate.edu/~jacksonay/rcoe/merriam.pdf>

Merriam, S. (2009). *Qualitative Research: A Guide to Design and Implementation*. San Francisco: Jossey-Bass.

Miles, M., Huberman, M. & Saldaña, J. (1983). *Qualitative Data Analysis: A methods Sourcebook*. (3<sup>rd</sup> ed.).

Ministerio de Educación Nacional (2006). *Estándares Básicos de Competencias en Lenguas Extranjeras: inglés*. Retrieved September 13, 2017, from [https://www.mineduacion.gov.co/1759/articles-115174\\_archivo\\_pdf.pdf](https://www.mineduacion.gov.co/1759/articles-115174_archivo_pdf.pdf)

Ministerio de Educación Nacional (2013). *Colombia bilingüe 2014-2018*. Retrieved September 13, 2017, from <http://www.colombiaaprende.edu.co/html/micrositios/1752/w3-article-315515.html>

Ministerio de Educación Nacional (2014). *Programa Nacional de Ingles: Colombia Very well!* Retrieved September 13, 2017, from

[http://www.colombiaaprende.edu.co/html/micrositios/1752/articles-343287\\_recurso\\_1.pdf](http://www.colombiaaprende.edu.co/html/micrositios/1752/articles-343287_recurso_1.pdf)

Perumal, T. (2014). Quantitative research methods. *Research Methodology*. Retrieved from [http://www.tankonyvtar.hu/hu/tartalom/tamop412A/2011-0021\\_22\\_research\\_methodology/CMRM6103\\_Research\\_methodology\\_08.pdf](http://www.tankonyvtar.hu/hu/tartalom/tamop412A/2011-0021_22_research_methodology/CMRM6103_Research_methodology_08.pdf)

Scott, A. (2013). Ethical principles in health care research, *Ethical Principles in Research*, (75-90). Retrieved from [http://doras.dcu.ie/19343/1/Ethical\\_Principles\\_in\\_research\\_editors\\_PHD\\_proofs\\_June\\_2013.pdf](http://doras.dcu.ie/19343/1/Ethical_Principles_in_research_editors_PHD_proofs_June_2013.pdf)

Scrivener, J. (2005). *Learning teaching: A guidebook for English language teachers* (2nd ed.). Oxford: Macmillan

Šišková, D. (2008) *Teaching Vocabulary through Music* (Tesis de grado). Retrieved from [https://is.muni.cz/th/slaym/Teaching\\_Vocabulary\\_through\\_Music.pdf](https://is.muni.cz/th/slaym/Teaching_Vocabulary_through_Music.pdf)

Surmont, J., Struys, E., Van Den Noort, M., & Van Den Craen, P. (2016). The effects of CLIL on mathematical content learning: a longitudinal study. *Studies in second language learning and teaching*, 6(2), 319-337. doi: 10.14746/ssllt.2016.6.2.7

Wolff, D. (2003). Integrating language and content in the language classroom: Are transfer of knowledge and of language ensured? *Pratiques et recherches en centres de langues*, 41(42), 35-46. Retrieved from <https://asp.revues.org/1154>

---